SHARP **SERVICE MANUAL**

No. 00ZFO6700USME

FACSIMILE

MODEL FO-6700

OPTION:DUAL LINE KIT

MODEL FO-67DL

SELECTION CODE	DESTINATION
U	U.S.A.

The FO-6700U Service Manual contains information which differs from the FO-5800U Service Manual.
For additional information, refer to the FO-5800U/C (00ZFO5800USME), FO-4700U/FO47UC (00ZFO4700USME) Service Manuals.

CAUTION

This laser facsimile is a class 1 laser product that complies with 21CFR 1040.10 and 1040.11 of the CDRH or IEC60825-1 standard. This means that this machine does not produce a hazardous laser radiation. The use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This laser radiation is not a danger to the skin, but when an exact focusing of the laser beam is achieved on the eyes retina, there is danger of spot damage to the retina.

The following cautions must be observed to avoid exposure of the laser beam to your eyes at the time of servicing.

1) When a problem in the Laser Optical Unit has occurred, the whole Optical Unit must be exchanged as a unit.
2) Do not look into the machine with the Main Switch turned on after removing the Toner/Developer Unit and Drum Cartridge.
3) Do not look into the laser beam exposure slit of the Laser Optical Unit with the connector connected when removing and installing the Optical Unit.
4) The cover of Laser Printer Unit contains the Safety Interlock Switch. Do not defeat the safety interlock by inserting wedges or other items into the switch slot.

Laser Wave Length : 770-810 mm
Laser Pulse Times : 49.2 µs
Laser Output Power : 0.37 mW

Parts marked with "⚠" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CAUTION FOR BATTERY REPLACEMENT

(Danish) ADVARSEL !
Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.

(English) Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the equipment manufacturer.
Discard used batteries according to manufacturer's instructions.

(Finnish) VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

(French) ATTENTION
Il y a danger d'explosion s' il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type recommandé par le constructeur.
Mettre au rébut les batteries usagées conformément aux
instructions du fabricant.

(Swedish) VARNING
Explosionsfare vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

(German) Achtung
Explosionsgefahr bei Verwendung inkorrekter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

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CHAPTER 1. GENERAL DESCRIPTION

[1] Specifications

- **GENERAL**

Automatic dialing	Conventional Auto Dialing: Rapid Key Dialing: 48 numbers Speed Dialing: 200 numbers Personal Auto Dial Books: 30 books (48 Rapid Keys, 16 Speed Dial numbers per book)
Memory size*	4 MB (approx. 256 pages)
Modem speed	33,600 bps (max.) Automatic fallback to lower speeds.
Transmission time*	Approx. 2 seconds
Toner cartridge yield (4% page coverage,letter paper)	**Initial starter cartridge** (included with fax machine): Approx. 3000 pages **Replacement cartridge (FO-47ND):** Approx. 6000 pages
Drum cartridge yield	**Initial starter cartridge** (included with fax machine): 20,000 pages (avg.) **Replacement cartridge (FO-47DR):** 20,000 pages (avg.)
Resolution	**Horizontal:** 203 pels/inch (8 pels/mm) **Vertical:** Standard: 98 lines/inch (3.85 lines/mm) Fine /Halftone: 196 lines/inch (7.7 lines/mm) Super fine: 391 lines/inch (15.4 lines mm)
Automatic document feeder	Letter paper (20 lb): Max. 50 pages Legal paper: Max. 20 pages (Note: 11" x17" paper must be loaded one page at a time.)
Paper capacity	1250 sheets (one 250 sheet tray and two 500 sheet cassettes)
Compression scheme	MMR, MR, MH, JBIG, Sharp (H2)
Halftone (grayscale)	64 levels
Applicable telephone line	Public switched telephone network
Compatibility	ITU-T (CCITT) G3 mode
Printing resolution	**Horizontal:** 406 lines/inch (16 lines/mm) **Vertical:** 391 lines/inch (15.4 lines/mm)
Input document size	Automatic feeding: Width: 5.8 to 10.1" (148 to 256 mm) Length: 5.0 to 14.3" (128 to 364 mm) Manual feeding: Width: 5.8 to 11.0" (148 to 279 mm) Length: 5.0 to 17.0" (128 to 432 mm)
Effective Scanning width	10.1" (256 mm) max.
Effective Printing width	8.0" (203 mm) max.
Reception modes	Auto/Manual
Instascan speed	30 ppm (letter-size documents, standard resolution)
Full Dual Access	Yes
Copy function	Single/Multi/Sort (99 copies/page)
Power requirements	120 V AC, 60 Hz
Operating temperature	50 - 86°F (10 - 30°C)
Humidity	20 to 85% RH
Power consumption	Standby: Without dual line option: 15 W With dual line option: 17W Maximum: 600 W
Dimensions	Width: 18.1" (460 mm) Depth: 15.4" (390 mm) Height: 20.1" (510 mm)
Weight	Approx. 55.1 lbs.(25.0kg)

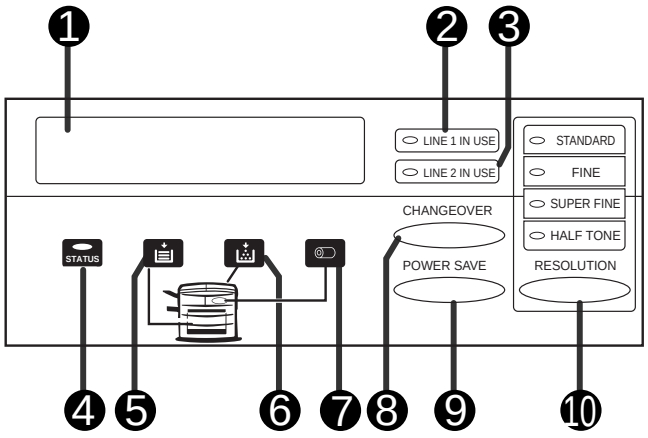
* Based on ITU-T Test Chart #1 at standard resolution in Sharp special mode, excluding time for protocol signals (i.e., ITU-T phase C time only).

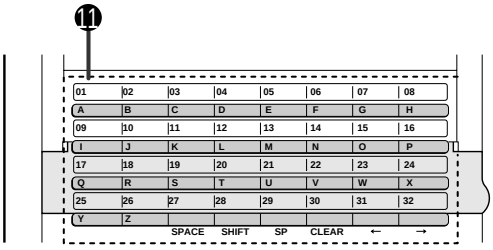
Option

Toner cartridge	**: FO-47ND**
Drum cartridge	**: FO-47DR**
Option memory	**: FO-4ML/8ML/12ML**
Verification stamp	**: FO-45VS**
Dual line kit	**: FO-67DL**

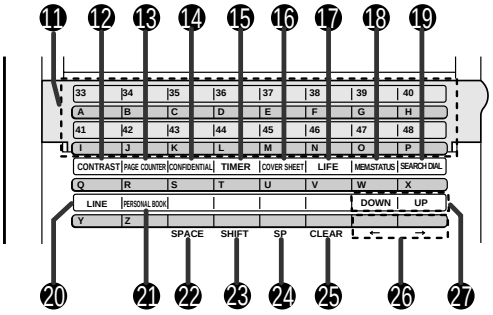
As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specifications figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

[2] Operation panel

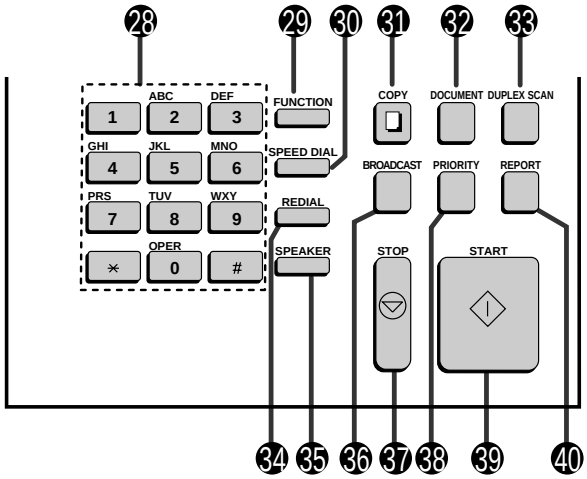




Rapid Key overlay down



Rapid Key overlay up



❶ Display
This displays messages and prompts during operation and programming.

❷ LINE 1 IN USE light
This lights when the fax machine is using the telephone line. (If you have installed the dual-line option, this lights when the fax machine is using Line 1).

❸ LINE 2 IN USE light
If you have installed the dual-line option, this lights when the fax machine is using Line 2.

❹ STATUS indicator
This blinks when a paper size error or paper jam occurs. It also blinks when the print compartment cover is open, or when the received document tray is not properly installed. A message appears in the display to indicate the problem.
The indicator lights steadily when a problem occurs which must be fixed by a service technician.

❺ Paper indicator
This blinks when one of the paper sources (tray or cassette) is out of paper, and lights steadily when all sources are out of paper.

❻ Toner indicator
This blinks when the toner cartridge nears empty, and lights steadily when the toner cartridge needs replacement.

❼ Drum indicator
This blinks when the drum cartridge needs replacement.

❽ CHANGEOVER key
Two types of information appear in the display: prompts related to operations you are performing, and information about how the fax is using the telephone line (transmitting, receiving, etc.). Press this key to change between the two types of information. If you have installed the dual-line option, three types of information appear: prompts related to operations you are performing, use of Line 1, and use of Line 2.

❾ POWER SAVE key
Press this key to turn on Power Save Mode, or set the Power Save Mode timer if TIMER has been selected with Option Setting 34 (Power Save Type).

❿ RESOLUTION key
Press this key to adjust the resolution before sending or copying a document.

⓫ Rapid Dial Keys
Press one of these keys to dial a fax number automatically. (Note that you must attach the Rapid Key labels.)

⓬ CONTRAST key
Press this key to adjust the contrast before sending or copying a document.

⓭ PAGE COUNTER key
Press this key to include a slash and the total number of pages after each page number on the pages of a transmitted document.

⓮ CONFIDENTIAL key
Press this key to send or print out a confidential document.

⓯ TIMER key
Press this key to set an operation to be performed automatically at a later time.

⓰ COVER SHEET key
Press this key to include a cover sheet when sending a fax.

⓱ LIFE key
Press this key, followed by **1**, to check the total number of pages printed by the fax machine.

⓲ **MEM. STATUS key**
Press this key to check the status of documents waiting in memory for transmission.

⓳ **SEARCH DIAL key**
Press this key to search through your auto dial fax numbers by name.

⓴ **LINE key**
If you have installed the dual-line option, press this key to select the line (Line-1 or Line-2) before dialing.

㉑ **PERSONAL BOOK**
Press this key to use or store an auto-dial number in a personal book. After you press the key, enter the passcode for the book.

㉒ **SPACE key**
Press this key to enter a space when programming a name

㉓ **SHIFT key**
Press this key to switch between upper and lower case letters when programming a name.

㉔ **SP key**
Press this key to enter a symbol when programming a name.

㉕ **CLEAR key**
Press this key to clear a mistake when programming a name or fax number.

㉖ **Arrow keys**
Press these keys to move the cursor forward or backward when programming a name or fax number.

㉗ **UP and DOWN keys**
Press these keys to adjust the volume of the speaker when the **SPEAKER** key has been pressed, or the volume of the ringer at any other time.

㉘ **Dial keypad (numeric keys)**
Use these keys to dial and program fax numbers.

㉙ **FUNCTION key**
Press this key to select various special functions.

㉚ **SPEED DIAL key**
Press this key to dial a Speed Dial number.

㉛ **COPY key**
Press this key to make a copy of a document.

㉜ **DOCUMENT key**
Press this key to transmit a document without reading it first into memory.

㉝ **DUPLEX SCAN key**
Press this key to transmit or copy a two-sided document.

㉞ **REDIAL key**
Press this key to automatically redial the last number dialed.

㉟ **SPEAKER key**
Press this key when transmitting a document by Normal Dialing to listen to the line and verify the response of the receiving fax machine.

㊱ **BROADCAST key**
Press this key to send a document to a group of receiving fax machines.

㊲ **STOP key**
Press this key to cancel an operation before it is completed.

㊳ **PRIORITY key**
Press this key when you need to transmit a document ahead of other documents waiting in memory for transmission.

㊴ **START key**
Press this key to begin transmission when using Speed Dialing, Direct Keypad Dialing, or Normal Dialing.

㊵ **REPORT key**
Press this key to print out a report on the most recently completed transmission or reception.

[6] Instructions for installing the FO-67DL dual line kit

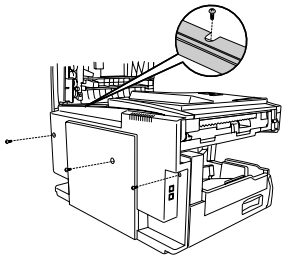
The FO-67DL is an option for the Sharp FO-6700

Important!

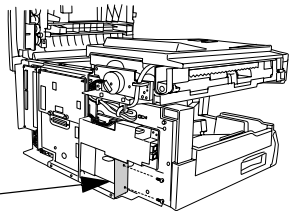
The following procedure is to be performed by qualified service technicians only. Be sure to turn off the power, unplug the power cord, unplug the telephone line, and unplug any extension telephone connected to the unit before proceeding.

1. Open the print compartment cover.

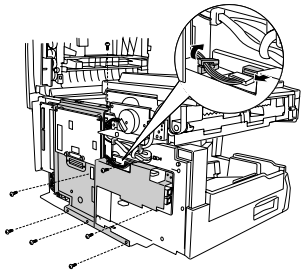
2. Remove the four screws that secure the rear cover, and then remove the rear cover.



3. Remove the two screws that secure the side plate, and then remove the side plate.

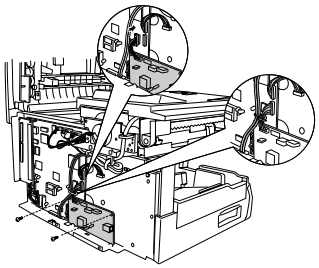


4. Disconnect the cable connector as shown. Remove the seven screws that secure the large plate, and then remove the large plate.



5. Insert the bottom edge of the line board into the slots as shown and then secure the top of the board with two screws. Connect the cable.

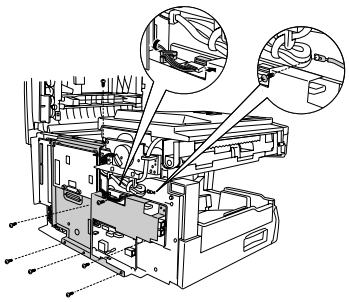
- Use the plastic cable band to bind the cables together as shown at right.



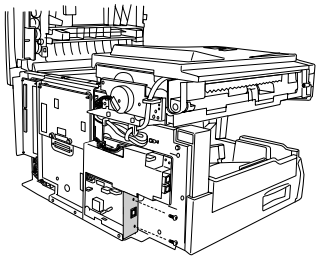
6. Replace the large plate and secure it with the seven screws.

- Be sure to insert the top right screw through the wire ring connector before securing.

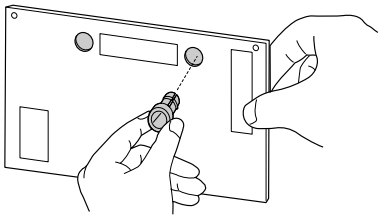
Reconnect the cable.



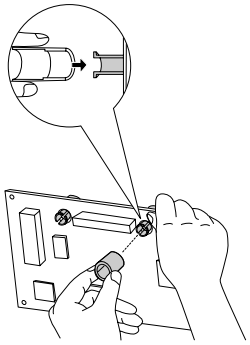
7. Attach the telephone jack plate and secure it with the two screws.



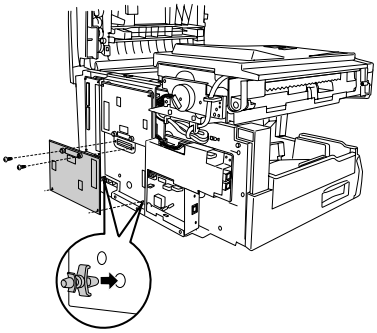
8. Insert the two plastic bushes into the holes in the circuit board (insert from the rear side of the circuit board).



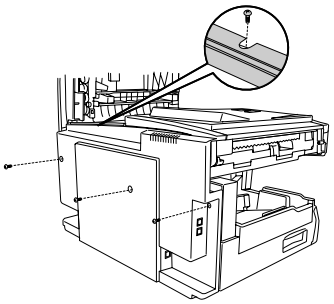
9. Fit the collars over the ends of the bushes to secure them in the board.



10. Insert the two plastic spacers into the plate as shown, and then attach the circuit board over the plate so that the connector on the board connects to the connector on the plate and the spacers fit into the holes in the board. Secure the board with two screws.



11. Replace the rear cover and secure it with the four screws. Close the print compartment cover.



Note: After installing the dual line option, be sure to enter the sender's name and fax number for Line 2 as explained on page 29 of the Operation Manual.

CHAPTER 2. ADJUSTMENTS

[1] Adjustments

General

Since the following adjustments and settings are provided for this model, make adjustments and/or setup as necessary.

1. Adjustments

Adjustments of output voltage (FACTORY ONLY)

1. Install the power supply unit in the machine.
2. Set the recording paper and document.
3. When the document is loaded, power is supplied to the output lines. Confirm that outputs are within the limits below.

Output voltage settings

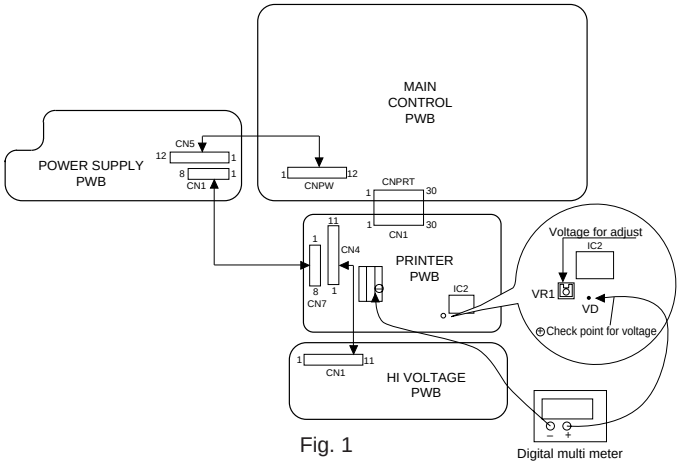


Fig. 1

Output	Voltage limits
+5V MAIN	4.845V~5.355V
+5V SUB	4.845V~5.355V
+24V MAIN	23.04V~24.96V
+24V SUB	23.04V~24.96V

Connector No. / Pin No.	CN4 / CN1
1 / 11	+5V
2 / 10	HV C HL
3 / 9	T VR
4 / 8	T REM
5 / 7	T MON
6 / 6	B MON
7 / 5	B VR
8 / 4	C REM
9 / 3	C MON
10 / 2	MG
11 / 1	+24

Connector No. / Pin No.	CN5 / CNPW
1	+24V SUB
2	MG
3	MG
4	MG
5	+24V MAIN
6	+24V MAIN
7	+5V SUB
8	DG
9	DG
10	DG
11	+5V MAIN
12	+5V MAIN

Connector No. / Pin No.	CN1 / CN7
1	24 MAIN
2	MG
3	DG
4	5V MAIN
5	HEATER ON
6	FAN
7	FAN LOCK
8	H RELAY OFF

ADJUST VOLTAGE LIST

Top Void Printer Label (mm.) Fig. 2	Adjust Voltage VR1 Fig. 1
5.5~6.9	4.42V
7.0~8.9	3.87V
9.0~10.9	3.14V
11.0~12.9	2.50V
13.0~14.9	1.86V
15.0~17.0	1.22V

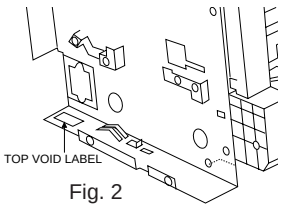


Fig. 2

2. IC protectors replacement

ICPs (IC Protectors) are installed to protect the TX motor drive circuit and verification stamp drive circuit. ICPs protect various ICs and electronic circuits from an overcurrent condition.

The location of ICPs are shown below:

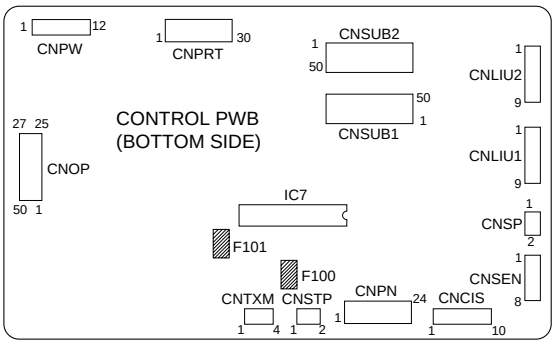


Fig. 3

(1) F100 (ICPS10) is installed in order to protect IC's from and overcurrent generated in the verification stamp drive circuit. If F100 is open, replace it with a new one.

(2) F101 (ICPS18) is installed in order to protect IC's from an overcurrent generated in the TX motor drive circuit. If F101 is open, replace it with a new one.
In addition to the replacement of F101 and F100, the factor causing F101 and F100 to open must also be repaired. If not, F101 and F100 will open again.
Replacement parts
ICPS10 (Sharp code: VHViCPS10//-1)
ICPS18 (Sharp code: VHViCPS18//-1)

3. Settings

(1) Dial mode selector

OPTION SETTING: DIAL MODE (Soft Switch No. SW2 DATA No. 1 for Line-1 and SW32 No.1 for Line-2 with Optional Line Unit)
Use this to set the fax machine to the type of telephone line you are on.

• The factory setting is "TONE".

(step 1) Select "OPTIONAL SETTING".

KEY: FUNCTION 4

DISPLAY: 4:OPTIONAL SETTING
ENTER #(01-34,✳,#)

(step 2) Select "DIAL MODE".

KEY: 2 2

DISPLAY: 22: DIAL MODE
1=TONE, 2=PULSE

<With optional line unit>

22: DIAL MODE
1=LINE-1, 2=LINE-2

Select line using "1" or "2"

KEY: 1

DISPLAY: 1: LINE-1
1=TONE, 2=PULSE

KEY: 2

DISPLAY: 2: LINE-2
1=TONE, 2=PULSE

(step 3) Select, using "1" or "2".

KEY: 1

DISPLAY: TONE SELECTED

KEY: 2

DISPLAY: PULSE SELECTED

(step 4) End, using the "STOP" key.

KEY: STOP

[2] Diagnostics and service soft switches

1. Operating procedure

Two kinds of diagnoses are supported.

1-1. Fax diagnosis

This diagnosis is concerned with the main body of fax which is used for production and service support.

Entering the diagnostic mode

Press FUNC → 9 → ✳ → 8 → # → 7 , and the following display will appear.

Without Optional Line Unit	With Optional Line Unit
MAIN: FBQ0✳ SUB: FEF0✳	MAIN: FBQ0✳ SUB: FEF0✳ FEF0✳

Then press the START key. Select the desired item with the ✳ key and the # key or select with the rapid key.

Enter the mode with the START key.

(Diag・specifications)

FUNC → 9 ✳ 8 # 7 → ROM: FBQ0✳
ROM: FEF0✳ → START

01	START	SOFT SWITCH MODE
02	START	PRINT AREA
03	START	ROM & RAM CHECK
04	START	AUTO FEEDER MODE
05	START	AGING MODE
06	START	PANEL CHECK MODE
07	START	OPTICAL ADJUST MODE
08	START	PRODUCT CHECK
09	START	SIGNAL SEND MODE
10	START	COMM. CHECK MODE
11	START	MEMORY CLEAR MODE
12	START	FLASH MEMORY CHECK
13	START	ALL FAX/TEL. ENTRY MODE
14	START	DEPT. PASSCODE
15	START	CONF. PASSCODE
16	START	PRINT HOLD CODE
17	START	MEMORY SET MODE
18	START	STAMP AGING
19	START	DIAL TEST MODE
20	START	COPY DIAG MODE
21		NO FUNCTION
22		NO FUNCTION
23	START	SIGNAL SEND 2 MODE
24	START	JBIG TEST MODE
25	START	PERSONAL BOOK LST

1-2. Print diagnosis

This diagnosis is concerned with the print which is used for production and service support.

Entering the diagnostic mode

Press FUNC → 9 → ✳ → 8 → # → 6 , and the following display will appear.

PCU ROM Ver.: ✳✳

Then press the START key. Select the desired item with ✳ the key and the # key or select with the rapid key.

Enter the mode with the START key.

(Diag・specifications)

FUNC → 9 ✳ 8 # 6 → PCU ROM Ver.: ✳✳ → START

01	START	AREA PRINT MODE
02	START	CHECK PATTERN 1
03	START	CHECK PATTERN 2
04	START	CHECK PATTERN 3
05	START	PAPER FEED AGING
06	START	BIAS ADJUST MODE
07	START	LIFE SET MODE
08	START	LIFE ALL CLEAR
09	START	LIFE ENTRY MODE
10	START	TOP ADJUST MODE
11	START	LIFE CLEAR MODE

Memory clear when power is turned on

Pressing the START and STOP keys, turn on the main power, and the following message will be displayed.

```
MEMORY  CLEAR ?
1 = ALL ,  2 = IMAGE ,  3 = NO
```

1 = All the data will be deleted including initially registered data.
2 = Delete the image file to be used in transmission. This will delete all the data related to communication such as reserved transmission or intercepting. However, the data initially registered will not be deleted.
3 = Memory will not be cleared and the machine enters stand-by mode.

- "2 = IMAGE" memory clear is done automatically, when power is turned on after FO-67DL is installed or removed.

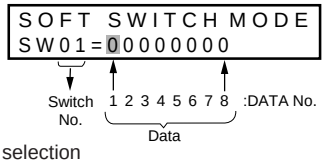
2. Diagnostic items description

2-1. Fax diagnosis

1) Soft switch mode

In this mode, the soft switch are set and the soft switch list is printed.

Soft switch mode screen



① Switch number selection

- Press START key for setting of the next soft switch. If the soft switch number is the final, pressing START key will exit the soft switch mode.
- Enter two digits of a soft switch number to set the switch number. If a switch number of unexisting soft switch is entered, key error buzzer sounds to reject the input.

② Data number selection
The cursor position shows the data to be set.
Pressing # key moves the cursor to the right. If, however, the cursor is on data number 8, pressing # key shifts the cursor to data number 1 of the next switch number. If the switch number is the final, pressing # key will exit the soft switch mode.
Pressing ⋊ key moves the cursor to the left. If, however, the cursor is on data number 1, pressing ⋊ key shifts the cursor to data number 1 of the former switch number. If the switch number is 1, pressing ⋊ key will not move the cursor and the error buzzer will sound.

③ Data setting method
Press the FUNCTION key, and the data at the position of the cursor will be reversed to 0 when it is 1, or to 1 when it is 0. (If the soft switch can be changed at the bit (Refer to ⑥.), the error buzzer will sound with the process not received.)

④ Outputting method of soft switch list
In the soft switch mode, press the REPORT key, and the soft switch list will be output.
If the recording paper runs out or is clogged, the key error buzzer will sound with the process not received.

⑤ Storage of data
In the following case, the data of the soft switches set will be stored.

- It is shifted to set the next soft switch by pressing the START switch.
- It is shifted to set the next soft switch with the [#] key.
- It is shifted to set the last soft switch with the [⋊] key.
- It is shifted to set another soft switch by inputting two digits as the switch number. (When 2 digits are completely input.)
- Output of the soft switch list is started.

⑥ Inhibition of data change
(This is also applicable for the optional setting.)
In the following case, it is inhibited to change the data with the key error buzzer.

- Switching ON/OFF of ECM during the use of image memory.
- Switching OFF to ON of the print hold function when the print hold pass code has not yet been registered.
- Clearing the print hold pass code when print hold function is ON.
- Switching ON/OFF of the print hold function during the use of memory such as in the case of substitute receiving.
- OFF to ON of telephone billing function which is using the image memory is used (Note: In the existing set, the telephone billing code function is specified from OFF to ON when the timer system communication (including the batch communication) is set.)
  Here, the memory is usable when the telephone billing code function is on. It can be set from ON to OFF while the memory is used. However, if setting is practically changed even once, it can not be returned from OFF to ON.
- Switching ON/OFF of PC interface function during the use of image memory.
- OFF to ON of department control function during use of image memory.
  (Note: In the existing set, the department control function is set from OFF to ON when the timer communication (including the batch sending) or the memory hold is set.)
- ON to OFF of continuous serial polling function when the continuous serial polling is started.
  (Note: In the existing set, "ON to OFF of the continuous serial polling function when the continuous serial polling is registered" has been applied, but the conditions are now moderated. However, registration is impossible to the program of the new continuous serial polling when the continuous serial polling function is OFF.)
- In addition, change of all soft switches during communication

⑦ Linked change of data (This is the same even in the optional setting.)

- When the department control function is off, the multi TTI function and telephone billing code function are turned off.

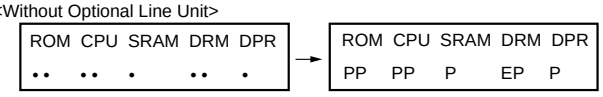
2) Print area

According to the size of the specified sheet, the effective printing area is printed.

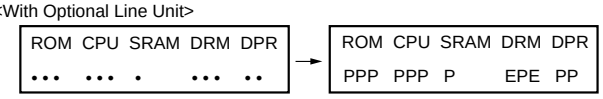
3) ROM & RAM check

No.	Device checked		Number of buzzer sound	Remarks
1	Main	ROM	<Short sound> 1 time	<Short sound>:
2		Integrated ROM	<Short sounds> 2 times	0.5 sec.ON / 0.5 sec.OFF
3		SRAM	<Short sounds> 3 times	<Long sounds>:
4		D-RAM	<Short sounds> 4 times	1.0 sec.ON / 0.5 sec.OFF
5	Sub1	ROM	<Long sound> 1 time	
6		Integrated ROM	<Long sounds> 2 times	
7		D-RAM	<Long sounds> 3 times	
8		Dual port RAM	<Long sounds> 4 times	
9	Sub2	ROM	<Long sounds> 5 times	
10		Integrated ROM	<Long sounds> 6 times	If the sub-2 PWB is not
11		D-RAM	<Long sounds> 7 times	installed, error buzzers
12		Dual port RAM	<Long sounds> 8 times	will not go off.

<Without Optional Line Unit>



<With Optional Line Unit>

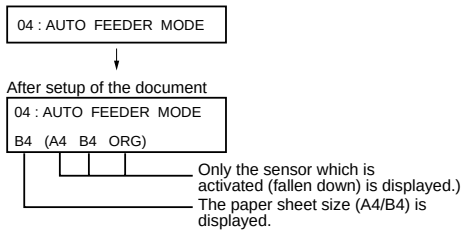


4) Auto feeder mode

The auto feed function can be checked by inserting and discharging the document. (The distance between pages can be displayed during operation of the scanner.)

① Check of auto feed function

After this mode is activated, set up the document, and press the START key, and it will be automatically fed. (Before the START key is pressed, the document sensor alone is activated.) Moreover, the document size (A4/B4) and sensor information (A4/B4/ORG) are displayed when the document sensor is turned.


04 : AUTO FEEDER MODE
After setup of the document
04 : AUTO FEEDER MODE
B4 (A4 B4 ORG)
Only the sensor which is activated (fallen down) is displayed.)
The paper sheet size (A4/B4) is displayed.

② Display of distance between pages during operation of the scanner

- Soon after this mode is activated, press the FUNCTION key for 5 seconds or more, and the display mode of the distance between pages will be activated. Then, set up the sending paper and select the image quality, and then press the START key, and operation will be started.
  Be sure to press the FUNCTION key prior to the START key. If the FUNCTION key is not pressed but the START key is pressed, it will operate in the same matter as in the existing auto feeder mode.
  If the START key is pressed, the FUNCTION key will be invalid hereafter. Therefore, the display mode of the distance between pages and the existing mode can not be changed.
- While the sending paper is read, the image quality key can be input. STD/FINE/S-FINE modes are usable. However, the same operation of FINE will be selected if the intermediate tone is set.
- The image quality, the length of the sending page read, the page distance to the next sending paper and the total of the sending papers read are shown on the display.
- When the stop key is pressed or 100 sending papers are read, the content shown on the display will be totally output as the list after the remaining sending papers are discharged.

5) Aging mode

If any document is set up in the first state (when started), copying will be executed. If it is not set up, "check pattern 1" of the print diagnosis is output at the intervals of 1 time/60 minutes. (A total of 10 sheets are output.)

6) Panel check mode

This is used to check whether each key is normally operated or not. According to the key input, LCD is displayed. Moreover, during execution, the document reading lamp is turned on.
Test results are printed. (The maximum 100 input keys can be printed .)
LED repeats lighting at regular intervals in sequence. (Lighting speed is specified separately.)
In case of inputting all keys, key input OK is displayed when finishing the STOP key.
When pressing the NUMERIC key during panel check, output of DTMF corresponding with the key is started.
When pressing other keys, output is stopped.

7) Optical adjust mode

When this mode is executed, the reading LED will be lit. This will go out if the STOP key is pressed.

8) Product check

The diagnosis is used in the production process.
After shift to the mode, the following operations are sequentially executed. At this time, the sensor of read-error can be checked by feeding the B4 document. Set up one short document of B4 size.

① Memory clear (Same as Diagnosis 11)

② Panel test (Same as Diagnosis 06)

③ Dial test (Same as Diagnosis 24)

④ Document auto feed

⑤ ROM & RAM test check (Same as the Diagnosis 03)

⑥ Flash memory test mode (Same as Diagnosis 12)

⑦ Registration of fixed data

Registration of rapid key No. and other data necessary for production.
The registered data are shown in the following table. The chain dial is not set for any destination.

Rapid No.	FAX No.	Rapid No.	FAX No.	Rapid No.	FAX No.	Rapid No.	FAX No.
01	20	06	25	11	1	21	01
02	21	07	26	12	2	22	02
03	22	08	27	13	3	23	03
04	23	09	28	14	4	24	04
05	24	10	29	15	5	25	05

⑧ Transmission check (Same as Diagnosis 10)
The soft switches necessary for production are set.

⑨ Test result print (one sheet)

Memory clear printing
Panel test result printing
ROM & RAM test result printing

⑩ Print area printing (one sheet)

9) Signal send mode

After shift to the mode, press the START key, and the signals will be transmitted in the following sequence.
It can be used to check the modem and so on.

[1] No signals

[2] 4800BPS (V27ter)

[3] 14400BPS (V. 33)

[4] 12000BPS (V. 33)

[5] 14400BPS (V. 17)

[6] 12000BPS (V. 17)

[7] 9600BPS (V. 17)

[8] 7200BPS (V. 17)

[9] 9600BPS (V. 29)

[10] 7200BPS (V. 29)

[11] 4800BPS (V27ter)

[12] 2400BPS (V27ter)

[13] 300BPS (FLAG)

[14] 2100Hz (CED)

[15] 1100Hz (CNG)

10) Comm. check mode

① Turn on the Line Monitor.

② Turn off the Cover Sheet Function.

③ Set Line Equivalence at 0 km.

After the check, it is necessary to be sure to return the aforementioned soft switches into the initial state.
(Clear the memory with the diagnosis.)

11) Memory clear mode

Clear the back-up memory to initialize the soft switches.
The Flash Memory will be initialized. Then, the initialized list be output.

12) Flash Memory check

The Flash Memory is checked.
The ordinary memories (ROM, SRAM, DRAM) are checked in the ROM & RAM check process. The write/read test is taken every block to print the result.

When an error occurs, the following error buzzer will sound.

Number of buzzer sounds	Check device
9 times <Short sounds>	Flash memory (Option)

During operation of this diagnosis, dual operation is not possible at all. If this is excessively repeated, it will shorten the life of the flash memory.

13) All FAX/TEL. entry mode

The function is used to simplify the registration of FAX/TEL No. during aging.

① The diagnosis mode is activated. If anything is not registered in the Rapid number 01 or any program or group is not registered, it will pass the diagnosis without doing anything.

② The FAX/TEL number (including the substitutive destination) of the Rapid number 01 is copied to the Rapid numbers 02 thru 48.

③ FAX number of the Rapid number 01 is copied to SPEED key numbers 001 thru 200.

④ If any chain dial is not in the Rapid number, the Rapid numbers 02 thru 48 and SPEED key numbers 001 thru 200 are registered in the group number 01.
If any chain dial is set, the group will be not produced but the chain dial setting alone of the Rapid number 01 will be reset.
(In all others except the Rapid number 01, the chain dials will be continuously set as they are.)

Rapid key	RXX	XX	: Rapid number
SPEED key	SXXX	XXX	: Speed key number

(16th and subsequential letters of the destination name registered in the Rapid number 01 will be discarded.)

⑤ Personal book 00 to 30 are set up. (Their PASSCODE to be registered are 0000 to 0030, and the NAME are "BOOK00" to "BOOK 30".)

⑥ The registration information of RAPID01 is copied to RAPID02 to 48 of each book.

⑦ The registration information of RAPID01 is copied to SPEED001 to 016 of each book.

⑧ When the chain dial is not set up in RAPID01, specify RAPID02 to 48 and SPEED001 to 016 in GROUP1 of each book.

14) Dept. passcode

The department passcode list is printed.

15) Conf. passcode

The confidential passcode list is printed.
Differing from printing of one box alone soon after registration, the confidential passcodes of all boxes are printed.

16) Print hold code

The print lockout passcode No. is printed.

17) Memory set mode

The set and dump list of the memory content is output.

- The address (8 digits (P) generally including the bank information is input, and the data of 2 digits is continuously input.
  Inputting is done in the hexadecimal mode. The ten-key is used for 0 thru 9, and the alphabetic keys A (RAPID 01 thru 06) are used for A thru F.
- During data inputting, the address can be moved forward and backward one byte by one byte with "><" and "#". (The address prior to the address 0 is looped as the maximum address.)
- The Validity of the address is not checked. Accordingly, writing/ reading operations are possible in the address of the memory not assigned, the address of ROM and so on.
  (However, as practical, writing is not done, and the data content runs short each reading.)
  Though writing is possible in the flash memory, a little time is required.
  It is also necessary to take care that the life of the flash memory is excessively shortened if much data is written in the flash memory. Since it may run away depending the written content, take minute care for the writing address.
- When the REPORT key is input, the memory dump list is produced from the displayed address (here, it is limited at the 16-byte boundary address (address with end 0) which does not exceed the specified address and is just in front.). The dump list is output to a maximum of 99 pages. If any data of one page can be repeatedly developed and printed, the list is sufficient. But it is not desired that the content of plural pages are developed in the memory once and are then printed. If the STOP key is pressed, it will pass to the diagnosis after the page which is now being printed is completed printed.
  If the address exceeds the maximum address, it will return to the address 0 and printing will be continued.

18) Stamp aging

Diag mode is left though it doesn't have this function.

19) Dial test mode

The mode is used to inspect whether dialing is accurate in two kinds of dial modes . All data which can be dialed in this mode are automatically called up in both PB mode and DP mode.

When this mode is activated, the following operations will be automatically executed . Whether the dialed content is right or not is judged with the external instrument which is connected to the line cable.

① After shift to the FAX diagnosis mode, press RAPID 24.
(Also switch the display with the [✳] and [#] keys.)

② Press the START key.

③ Turn on CML, and dial the following in the PB mode.
1, 2, 3, 4, 5, 6, 7, 8, 9, ✳, 0, #

④ Turn off CML 500 mS alone.

⑤ Dial the following in the DP mode.
1, 5, 9, 0

⑥ After dialing, turn off CML.

This mode uses the ordinary auto dial. (Accordingly, the signal sending time and minimum pause are all the same as ordinary.
The measurement result in this mode is completely all the same as in the ordinary dial mode.
Moreover, the same process as above is also done in the dial test mode which is executed in the product check mode.

20) Copy diag mode

In order to shorten the process time during production, this mode is used to automatically switch the copy mode. Three menus are provided.

1. ① Set up two documents. (In case of two documents or more, there is no problem.

   ② Press the START key.

   ③ Copy 1st document in the fine mode/density AUTO. (One sheet is printed in the ordinary copy mode.)

   ④ Copy 2nd (subsequential) document in the intermediate tone mode/density DARK. (In the ordinary copying mode, one sheet is printed when the RESOLUTION key is pressed three times.)

When copy test is tried during production or is checked in two modes (fine and intermediate tones), this mode is provided to reduce the troublesome work which makes the operator stand aside to change the mode. Accordingly, the fine and intermediate tones are merely switched, and the mode is not switched to another mode. (Input of the image quality/density key is invalid.)

2. Try the copy in the mode fixed at COPY REDUCE 95% and fine mode/density AUTO. At this time, don't change the soft key of COPY REDUCE. (Input of the image quality/density key is invalid.)

3. Continuously try the above items 1 and 2.

21) No function

22) No function

23) Signal send mode 2

The signals concerned with V.34 & V.8 are checked.
After this mode is activated, press the START key, and the signals will be sent in the following sequence.
It can be used to check the modem.

[1] No signal

[2] 33600BPS

[3] 31200BPS

[4] 28800BPS

[5] 26400BPS

[6] 24000BPS

[7] 21600BPS

[8] 19200BPS

[9] 16800BPS

[10] 14400BPS

[11] 12000BPS

[12] 9600BPS

[13] 7200BPS

[14] 4800BPS

[15] 2400BPS

24) JBIG test mode

① Enter the diagnostic mode.
② Press the RAPID24 button. ("24: JBIG TEST MODE" appears.)
③ Press the START key to begin the JBIG test operation.

When both tests are completed normally, the buzzer sounds and "JBIG TEST NORMAL END" appears at the same time.
If the decoding test terminates abnormally, the buzzer sounds and "ERROR: JBIG DECODE" appears at the same time.
If the encoding test terminates abnormally, the buzzer sounds and "ERROR: JBIG ENCODE" appears at the same time.

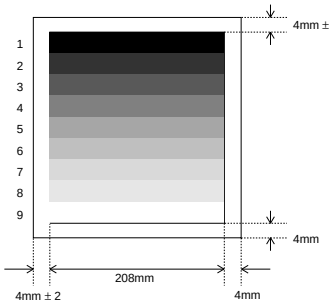
25) Personal book list

The PASSCODE of the personal book 00 to 30 are output.

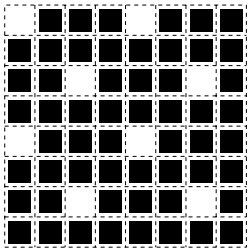
2-2. Print diagnosis

Rapid key 01: Area print mode

The effective printing area frame is printed in the specified sheet size.

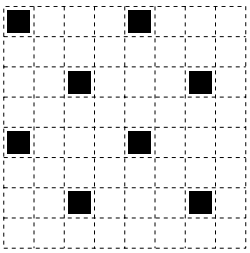


1. [Full black pattern]
2. [Intermediate tone 2 pattern]



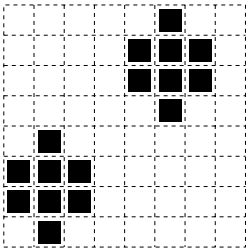
The left pattern is repeated.

3. [Intermediate tone 1 pattern]



The left pattern is repeated.

4. [Mesh point pattern]



The left pattern is repeated.

5. [Longitudinal strip 2 pattern]
   Black 2 dot and white 2 dot are repeated in line.
6. [Lateral strip 2 pattern]
   Black 2 line and white 2 line are repeated.
7. [Longitudinal strip 1 pattern]
   Black 1 dot and white 1 dot are repeated in line.
8. [Lateral strip 1 pattern]
   Black 1 line and white 1 line are repeated.
9. [Full White pattern]

Rapid key 02: Check pattern 1

The lateral stripe 2 pattern is printed on one sheet.
(Black 2 line and white 2 line are repeated.)

Rapid key 03: Check pattern 2

The lateral stripe 2 pattern is printed on multiple pages.
Press the STOP key to end the printing.

Rapid key 04: Check pattern 3

The intermediate tone 1 is printed on one sheet.

Rapid key 05: Paper feed aging

The mode is used for aging related to the printing. In this mode, the following modes are provided.

① Blank paper aging mode (ALL WHITE AGING)
② Whole black print aging mode (ALL BLACK AGING)
③ 4% printing aging mode (4% AGING)

After selecting the paper-pass aging mode in the print diagnosis mode, input the number of each mode above with the ten-key, and the mode will be executed. The detailed specifications of each mode are described as follows. Here, the operation in each mode is stopped only when the STOP key is pressed by the operator or a printing-impossible error occurs.

- Blank paper aging mode
  In the mode, printing is continued in the whole white (white paper) printing pattern until the STOP key is pressed by the operator. (In the printing area)
- Whole black printing aging mode
  In the mode, printing is continued in the whole black (whole black) printing pattern until the STOP key is pressed by the operator. (In the printing area)

Rapid key 06: Bias adjust mode

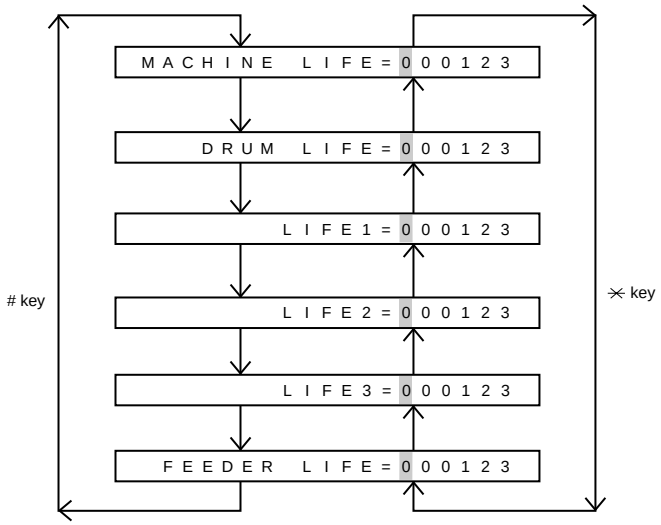
The mode is used to adjust the printing density of the printed image. The image printing density is adjustable in seven steps of 1 to 7.
For details, refer to the following table. (For selection, use the keys 1 thru 7.)

Image printing density	Thin ←					→ Thick	
	1	2	3	4	5	6	7
Default value				◎			

Rapid key 07: Life set mode

The mode is used to set the life counter of the printer and the counter of the auto feeder at desired values. For setting, proceed with the following procedure.

① When the life counter setting mode is selected, the following will be is displayed.



The cursor blinks at the top data.
Five counters can be selected with the "#" and "⋇" keys.

② In the state ①, input a desired setting number of 6 digits with the ten-key.

③ After input of 6 digits, shift to another counter with the "#" and "⋇" keys as necessary. When all necessary counters are completely input, press the START key.

④ "STORED" will be displayed with the set values stored into the memory. For checking, retry this mode.

Note:
This counter indicates the printer use conditions such as numbers of printed pages from the beginning of use. In the normal memory clear condition, the counter will not be reset.
In conditions including damaged memory contents caused by repairing the panel, this counter should be reset or cleared in addition to the ordinary memory clear.

Operation Manual for multipurpose Counter Life 1-3

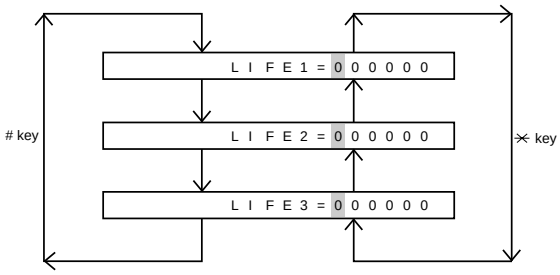
The FAST function of LIFE 1-3 automatically notifies the dealer that the printer life has reached the optional judgement value. This function can be applied to notify when the life of consumables such as the printing unit and fixer is expired.

How to use it

(1) Set the optional judgement value (counter value for alarming) of the multipurpose life counter 1-3 in the printer diagnotor 09: LIFE ENTRY MODE.

The setting procedure is as follows:

1. Select each counter with "⋇" or "#" key. (Refer to the chart below.)



2. Enter 6 digits using the ten key on the screen of the judgement value to be set.
3. If another value is to be set after completion of the first entry, move onto another value with "#" or "⋇" key and enter digits in the same procedure. Press the "START" key when all values are entered. (Writing is completed when "STORED" appears on the display.)

(2) The counter whose value is set in (1) will start counting every time a letter is printed.
(3) When each counter reaches its judgement value, the FAST auto matic notification function is activated and alarms it to the dealer.

• If the FAST function is off, the counter only counts and does not notify the dealer automatically.

Rapid key 08: Life all clear

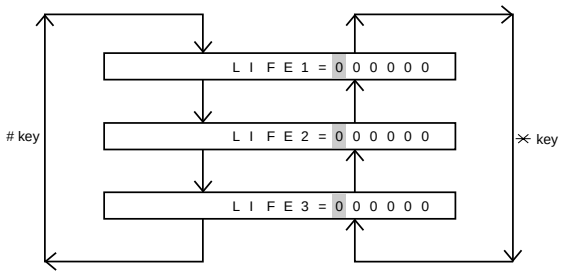
The mode is used to clear the life counter of the printer of the counter of the auto feeder.

Note: The counter shows the operational state of the printer (e.g. how many sheets have been printed since start of use?). The ordinary memory does not reset the counter. Accordingly, it is necessary to reset this counter in addition to the ordinary memory clear if the content in the memory on the control PWB is broken because of PWB repair, etc. (In the production stage, it is necessary to execute this in the last process.)

Rapid key 09: Life entry mode (For Serviceman temporary counter)

The mode is used to set a desired value for the judgment value (alarm judgment counter value) of the general purpose life counters 1 thru 3 of the printer. If the life of a consumable part (developer, imprinter, etc) is set, the model which has the error display and RMS function will inform RMS when the counter reaches the set value. For setting, proceed with the following procedure.

① When the life counter setting mode is selected, the following will be displayed.



The cursor blinks at the top data.
Three counters can be selected with the "#" and "⋇" keys.

② In the state ① , input a desired setting number of 6 digits with the ten-key.

③ After input of 6 digits, shift to another counter with the "#" and "⋇" keys as necessary. When all necessary counters are completely input, press the START key.

④ "STORED" will be displayed with the set values stored into the memory. For checking, retry this mode.

Note: The counter shows the operational state of the printer (how many sheets have been printed since start of use? and others). The ordinary memory does not reset the counter. Accordingly, it is necessary to reset the counter or do the clear process in addition to the ordinary memory clear if the content in the memory on the control PWB is broken because of PWB repair, etc. (In the production stage, it is necessary to execute this in the last process.)

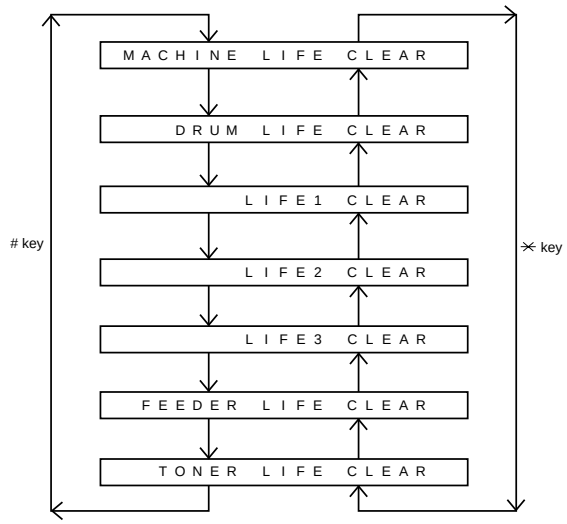
Rapid key 10: Top adjust mode

As the method to adjust the top margin for printing, adjust top margin adjusting VR on the PWB. If this mode is used at this time, adjustment is possible without the printing test every time when VR is turned.
For the practical use, determine the adjusting value on the basis of the old data, and adjust to the determined value in this mode. Then, check it with the printing test.

Rapid key 11: Life clear mode

The mode is used to respectively clear the life counter of the printer and the counter of the auto feeder. For setting, proceed with the following procedure.

① When the life counter clearing mode is selected, the following will be is displayed.
Seven counters can be selected with the "#" and "⋇" keys.

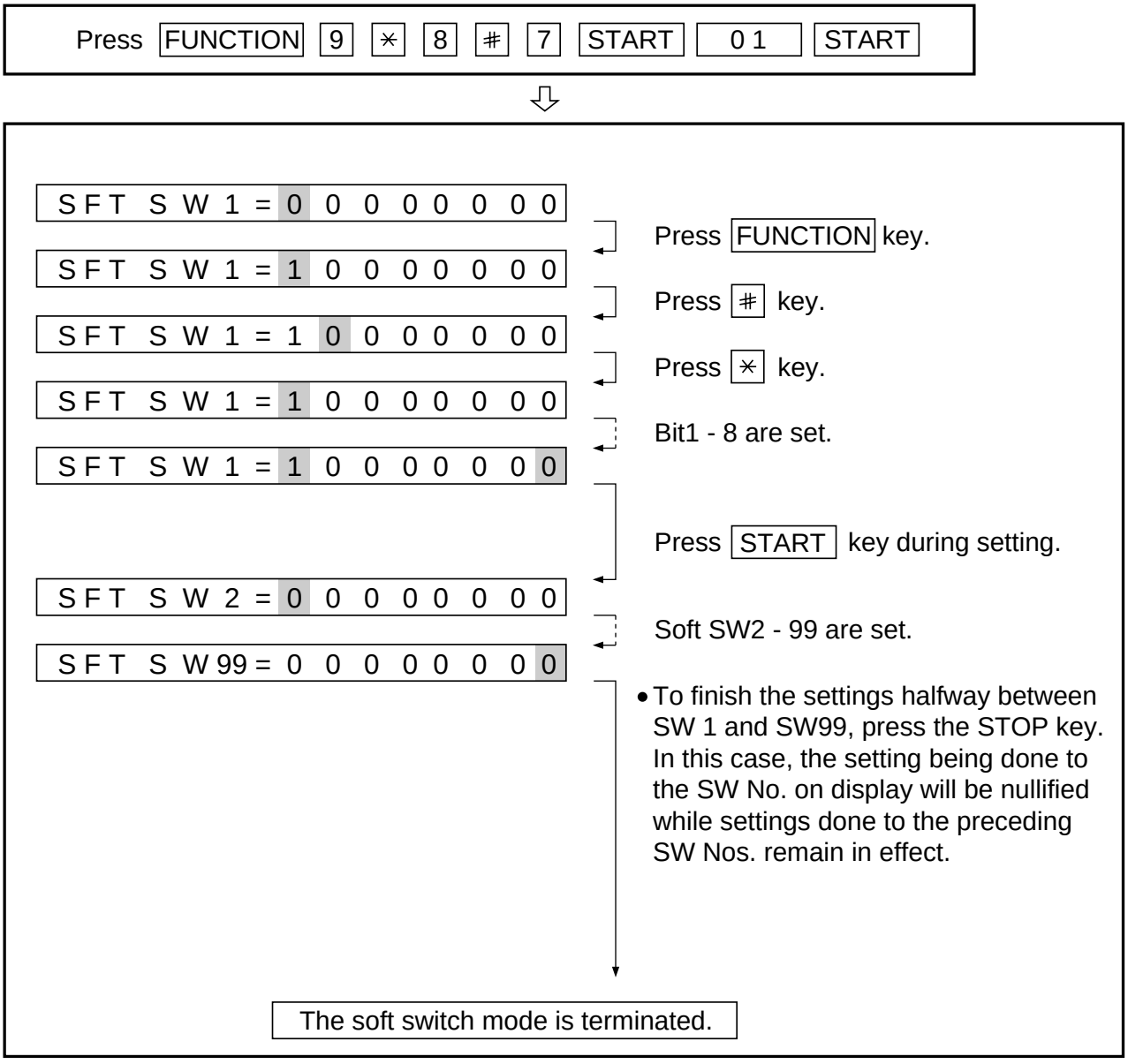


② In the state ①, input the CLEAR key, and the counter will be respectively cleared.

③ After one clear, move the cursor to another counter with the "#" and "⋇" keys as necessary, and then press the CLEAR key. When the necessary counters are completely cleared, press the STOP key.

3. How to make soft switch setting

To enter the soft switch mode, make the following key entries in sequence.


Press FUNCTION 9 ✳ 8 # 7 START 0 1 START
SFT SW 1 = 0 0 0 0 0 0 0 0
SFT SW 1 = 1 0 0 0 0 0 0 0
SFT SW 1 = 1 0 0 0 0 0 0 0
SFT SW 1 = 1 0 0 0 0 0 0 0
SFT SW 1 = 1 0 0 0 0 0 0 0
SFT SW 2 = 0 0 0 0 0 0 0 0
SFT SW 99 = 0 0 0 0 0 0 0 0
Press FUNCTION key.
Press # key.
Press ✳ key.
Bit1 - 8 are set.
Press START key during setting.
Soft SW2 - 99 are set.
• To finish the settings halfway between SW 1 and SW99, press the STOP key. In this case, the setting being done to the SW No. on display will be nullified while settings done to the preceding SW Nos. remain in effect.
The soft switch mode is terminated.

- SW1 to SW30 : For line 1
- SW31 to SW60 : For line 2

4. Soft switch description

• Soft switch

SW NO.	DATA NO.	ITEM	Switch setting and function						Initial setting	Remarks
			1					0		
SW1	1	Recall interval	Binary input 8 4 2 1						0	OPTION
	2		No. = 1 2 3 4 (Data No.)						1	Set to 1~15
	3		EX 0 1 0 1						0	
	4		eg. Recall interval is set to 5 min.						1	
	5	Recall times	Binary input 8 4 2 1						0	OPTION
	6		No. = 5 6 7 8 (Data No.)						0	Set to 0~14
	7		EX 0 0 1 0						1	
	8		eg. Recall times is set to 2 times.						0	
SW2	1	Dial mode	PULSE					TONE	0	
	2	Receive mode	AUTO					MANUAL	1	
	3	ECM mode	Off					On	0	OPTION
	4	Reserved							0	
	5	Polling security	On					Off	1	OPTION
	6	Auto cover sheet	No					Yes	1	OPTION
	7	JUNK-FAX function in manual reception	Yes					No	0	
	8	JUNK-FAX function	Yes					No	0	OPTION
SW3	1	Number of rings for auto-receive	Binary input 8 4 2 1						0	OPTION
	2	(0: No ring receive)	No. = 1 2 3 4 (Data No.)						0	Set to 0~9
	3		EX 0 0 0 1						0	
	4		eg. Number of rings for auto receive is set to 1 time.						1	
	5	Switch to auto-receive from manual receive	Binary input 8 4 2 1						0	OPTION
	6	(0: No switch)	No. = 5 6 7 8 (Data No.)						0	Set to 0~9
	7		EX 0 0 0 0						0	
	8		eg. Switch to auto receive is set to disable.						0	
SW4		Communication results printout		Printed at error only	Printed at error/timer/ memory only	Printed at transmis- sion mode only	Not printed	Printed every time		OPTION
	1		No. 1	0	0	0	1	1	0	
	2		No. 2	0	0	1	0	1	0	
	3		No. 3	1	0	0	0	0	1	
	4	Image addition function to the communication result table (for memory transmission only)	On					Off	1	OPTION
	5	Reserved							0	
	6	TEL billing code function	On					Off	0	OPTION
	7	Billing code position	Before					After	1	OPTION
	8	Multi-TTI feature	On					Off	0	OPTION
SW5	1	Time display format	24 hours					12 hours-AM/PM	0	
	2	Date display format	Month-Day-Year					Day-Month-Year	1	
	3	Header print	Off					On	0	
	4	Footer print	On					Off	0	
	5	Relay data output	No					Yes	0	
	6	Substitute reception	Off					On	0	
	7	Substitute reception conditions	Reception disable without TSI					Reception enable without TSI	0	
	8	CSI transmission	Off					On	0	

SW NO.	DATA NO.	ITEM	Switch setting and function										Initial setting	Remarks
			1						0					
SW6	1	JBIG (Joint Bi-level Image Group)	On						Off				1	
	2	JBIG option	On						Off				0	
	3	MMR	On						Off				1	
	4	MR	On						Off				1	
		Modem speed		V.33		V.17				V. 29		V. 27ter		
				14400	12000	14400	12000	9600	7200	9600	7200	4800	2400	
	5		No. 5	0	0	1	1	1	1	0	0	0	0	1	
	6		No. 6	1	1	0	0	0	0	0	0	0	0	0	
	7		No. 7	0	1	0	1	0	1	0	1	1	0	0	
	8		No. 8	0	0	0	0	1	1	1	1	0	0	0	
SW7		Reception speed fixed			NO		V. 17-14400bps		V. 29-9600bps		V. 27ter-4800bps			When 14400bps MODEM used, setting to 14400bps is ignored.
	1		No. 1		0		1		0		1		0	
	2		No. 2		0		1		1		0		0	
	3	DIS receive acknowledge during G3 transmission	Twice				Once in NSF reception, twice in DIS reception						0	Effective to international comm.
	4	Non-modulated carrier in V.29 transmission mode	On				Off						0	
	5	CNG send when manual TX	On				Off						1	
	6	Protocol monitor	On				Off						0	
	7	Line monitor	On				Off						0	
	8	Max. length for TX/RX/Copy	TX: unlimited, RX: unlimited				TX/Copy: 1.0m, RX: 1.5m						0	
SW8		Compromised equalizer			0Km		1.8Km		3.6Km		7.2Km			Valid when transmitting
	1		No. 1		0		0		1		1		0	
	2		No. 2		0		1		0		1		0	
	3	H2 mode	No				Yes						0	
	4	Signal transmission level	Binary input 16 8 4 2 1										0	
	5		No. = 4 5 6 7 8 (Data No.)										1	
	6		EX 0 1 1 0 1										1	
	7		eg. Signal transmission level is set to -10dBm										0	
	8												1	
SW9		CED tone signal interval			75ms		500ms		750ms		1000ms			
	1		No. 1		0		0		1		1		0	
	2		No. 2		0		1		0		1		0	
	3	Equalizer freeze	On				Off						0	
	4	Equalizer freeze conditions	All				7200bps						0	
	5	CED detection time	500ms				1000ms						0	
		Alarm buzzer			3sec		1sec		No BEEP		No BEEP			
	6		No. 5		0		0		1		1		0	
	7		No. 6		0		1		0		1		0	
	8	Action when RTN received	Handle to error				Handle to no error						0	

SW NO.	DATA NO.	ITEM	Switch setting and function					Initial setting	Remarks
			1				0		
SW10	1	Memory retransmission times	Binary input 8 4 2 1					1	OPTION
	2		No. = 1 2 3 4 (Data No.)					0	
	3		EX 1 0 1 0					1	
	4		eg. Retransmission time set to 10 times.					0	
	5	Memory retransmission interval	Binary input 8 4 2 1					0	OPTION
	6		No. = 5 6 7 8 (Data No.)					0	
	7		EX 0 0 1 0					1	
	8							0	
SW11	1	V.34 mode transmission speed	Sending speed = 2400 (bps) x N					1	
	2		Example :					1	
	3		2400 (bps) x 12 = 28800 (bps)					1	
	4		2400 (bps) is set for N=0. 33600 (bps) is set for N=15.					0	
	5	V.34 mode receiving speed	Receiving speed = 2400 (bps) x N					1	
	6		Example :					1	
	7		2400 (bps) x 12 = 28800 (bps)					1	
	8		2400 (bps) is set for N=0. 33600 (bps) is set for N=15.					0	
SW12	1	V.34 mode function in case of manual communication	On			Off		1	
	2	V.34 mode function	On			Off		1	
	3	V.34 control channel communication speed	2400bps			1200bps		0	
		EOL detection timer		13sec		25sec	5sec	5sec		
	4		No. 4	0		0	1	1	0	
	5		No. 5	0		1	0	1	0	
		Processing of DIS reception after DIS transmission		Retransmitting command		A line is cut	Apply to T.30	T.30+α		
	6		No. 6	0		0	1	1	0	
	7		No. 7	0		1	0	1	0	
	8	The change to DB from DP by ✕	Yes			No			0	
SW13	1	DTMF output level (High)	Binary input 16 8 4 2 1					0	
	2		No. = 1 2 3 4 5 (Data No.) n x 0.5dBm					1	
	3		EX 0 1 1 0 0					1	
	4		eg. Signal transmission level is set to -10dBm					0	
	5							0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW14	1	DTMF output level (Low)	Binary input 16 8 4 2 1					1	
	2		No. = 1 2 3 4 5 (Data No.) n x 0.5dBm					0	
	3		EX 1 0 0 0 0					0	
	4		eg. Signal transmission level is set to -10dBm					0	
	5							0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	

SW NO.	DATA NO.	ITEM	Switch setting and function								Initial setting	Remarks
			1				0					
SW15	1	Reserved									0	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
		CI Signal OFF detect enable time	(ms)	200	300	350	400	500	700	1200		
	5		No. 5	0	0	0	0	0	0	0	0	
	6		No. 6	0	0	0	0	1	1	1	1	
	7		No. 7	0	0	1	1	0	0	1	0	
	8		No. 8	0	1	0	1	0	1	0	1	
SW16	1	Reserved									0	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
		Distinctive ringing		OFF	STD	RING1	RING2	RING3	RING4	RING5		
	5		No. 5	0	0	1	0	1	0	1	0	
	6		No. 6	0	0	0	1	1	0	0	0	
	7		No. 7	0	0	0	0	0	1	1	0	
	8		No. 8	0	1	0	0	0	0	0	0	
SW17	1	Reserved									0	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									0	
	6	Reserved									0	
	7	Reserved									0	
	8	Reserved									1	
SW18	1	Reserved									1	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									1	
	6	Reserved									1	
	7	Reserved									0	
	8	Reserved									0	
SW19	1	Reserved									1	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									1	
	6	Reserved									0	
	7	Reserved									0	
	8	Reserved									0	
SW20	1	Reserved									0	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									0	
	6	Reserved									0	
	7	Reserved									0	
	8	Reserved									0	

SW NO.	DATA NO.	ITEM	Switch setting and function						Initial setting	Remarks
			1			0				
SW21	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Busy tone detection frequency		520~640Hz	300~600Hz	380~500Hz	reserve	reserve		
			No. 4	0	0	0	0	1	0	
	5		No. 5	0	0	1	1	0	0	
	6		No. 6	0	1	0	1	0	0	
	7	Reserved							0	
	8	Reserved							0	
SW22	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW23	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW24	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW25	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW26	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW27	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW28	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW29	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW30	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW31	1	Reserved			0	
	2	Reserved			1	
	3	Reserved			0	
	4	Reserved			1	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			1	
	8	Reserved			0	

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW32	1	Dial mode	PULSE	TONE	0	
	2	Reserved			1	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			1	
	6	Reserved			1	
	7	Reserved			0	
	8	Reserved			0	
SW33	1	Number of rings for auto-receive	Binary input 8 4 2 1		0	OPTION
	2	(0: No ring receive)	No. = 1 2 3 4 (Data No.)		0	Set to 0~9
	3		EX 0 0 0 1		0	
	4		eg. Number of rings for auto receive is set to 1 time		1	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW34	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			1	
	4	Reserved			1	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			1	
	8	Reserved			0	
SW35	1	Reserved			0	
	2	Reserved			1	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW36	1	JBIG (Joint Bi-level Image Group)	On	Off	1	
	2	JBIG Option	On	Off	0	
	3	MMR	On	Off	1	
	4	MR	On	Off	1	
		Modem speed	V.33: 14400 12000 / V.17: 14400 12000 9600 7200 / V. 29: 9600 7200 / V. 27ter: 4800 2400			
	5		No. 5: 0 0 / 1 1 1 1 / 0 0 / 0 0		1	
	6		No. 6: 1 1 / 0 0 0 0 / 0 0 / 0 0		0	
	7		No. 7: 0 1 / 0 1 0 1 / 0 1 / 1 0		0	
	8		No. 8: 0 0 / 0 0 1 1 / 1 1 / 0 0		0	
SW37		Reception speed fixed	NO / V. 17-14400bps / V. 29-9600bps / V. 27ter-4800bps			When 14400bps MODEM used, setting to 14400bps is ignored.
	1		No. 1: 0 / 1 / 0 / 1		0	
	2		No. 2: 0 / 1 / 1 / 0		0	
	3	DIS receive acknowledge during G3 transmission	Twice	Once in NSF reception, twice in DIS reception	0	Effective to international comm.
	4	Non-modulated carrier in V.29 transmission mode	On	Off	0	
	5	CNG send when manual TX	On	Off	1	
	6	Protocol monitor	On	Off	0	
	7	Line monitor	On	Off	0	
	8	Reserved			0	

SW NO.	DATA NO.	ITEM	Switch setting and function					Initial setting	Remarks
			1		0				
SW38		Compromised equalizer		0Km	1.8Km	3.6Km	7.2Km		Valid when transmitting
	1		No. 1	0	0	1	1	0	
	2		No. 2	0	1	0	1	0	
	3	H2 mode	No		Yes			0	
	4	Signal transmission level	Binary input 16 8 4 2 1					0	
	5		No. = 4 5 6 7 8 (Data No.)					1	
	6		EX 0 1 1 0 1					1	
	7		eg. Signal transmission level is set to -10dBm					0	
	8							1	
SW39		CED tone signal interval		75ms	500ms	750ms	1000ms		
	1		No. 1	0	0	1	1	0	
	2		No. 2	0	1	0	1	0	
	3	Equalizer freeze	On		Off			0	
	4	Equalizer freeze conditions	All		7200bps			0	
	5	CED detection time	500ms		1000ms			0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW40	1	Reserved						1	
	2	Reserved						0	
	3	Reserved						1	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						1	
	8	Reserved						0	
SW41	1	V.34 mode transmission speed	Sending speed = 2400 (bps) x N					1	
	2		Example :					1	
	3		2400 (bps) x 12 = 28800 (bps)					1	
	4		2400 (bps) is set for N=0. 33600 (bps) is set for N=15.					0	
	5	V.34 mode receiving speed	Receiving speed = 2400 (bps) x N					1	
	6		Example :					1	
	7		2400 (bps) x 12 = 28800 (bps)					1	
	8		2400 (bps) is set for N=0. 33600 (bps) is set for N=15.					0	
SW42	1	Reserved						1	
	2	V.34 mode function	On		Off			1	
	3	V.34 control channel communication speed	2400bps		1200bps			0	
		EOL detection timer		13sec	25sec	5sec	5sec		
	4		No. 4	0	0	1	1	0	
	5		No. 5	0	1	0	1	0	
		Processing of DIS reception after DIS transmission		Retransmitting command	A line is cut	Apply to T.30	T.30+α		
	6		No. 6	0	0	1	1	0	
	7		No. 7	0	1	0	1	0	
	8	The change to DB from DP by ✳	Yes		No			0	
SW43	1	DTMF output level (High)	Binary input 16 8 4 2 1					0	
	2		No. = 1 2 3 4 5 (Data No.) n x 0.5dBm					1	
	3		EX 0 1 1 0 0					1	
	4		eg. Signal transmission level is set to -10dBm					0	
	5							0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	

SW NO.	DATA NO.	ITEM	Switch setting and function										Initial setting	Remarks
			1									0		
SW44	1	DTMF output level (Low)	Binary input	16	8	4	2	1					1	
	2		No. =	1	2	3	4	5	(Data No.)	n x 0.5dBm			0	
	3		EX	1	0	0	0	0					0	
	4		eg. Signal transmission level is set to -10dBm										0	
	5												0	
	6	Reserved											0	
	7	Reserved											0	
	8	Reserved											0	
SW45		Frequency of CI signal	(Hz)	11.6~76.9	14.0~76.9	14.5~76.9	15.5~76.9	20.0~58.8	20.0~66.6	19.6~76.9	25.0~58.8	35.0~76.9		
	1		No. 1	0	0	0	0	0	0	0	0	1	0	
	2		No. 2	0	0	0	0	1	1	1	1	0	0	
	3		No. 3	0	0	1	1	0	0	1	1	0	0	
	4		No. 4	0	1	0	1	0	1	0	1	0	0	
		CI signal off detect enable time	(ms)	200		300		350	400		500	700	1200		
	5		No. 5	0		0		0	0		0	0	0	0	
	6		No. 6	0		0		0	0		1	1	1	1	
	7		No. 7	0		0		1	1		0	0	1	0	
	8		No. 8	0		1		0	1		0	1	0	1	
SW46	1	Reserved											0	
	2	Reserved											0	
	3	Reserved											0	
	4	Reserved											0	
		Distinctive ringing		OFF		STD		RING1	RING2		RING3	RING4	RING5		
	5		No. 5	0		0		1	0		1	0	1	0	
	6		No. 6	0		0		0	1		1	0	0	0	
	7		No. 7	0		0		0	0		0	1	1	0	
	8		No. 8	0		1		0	0		0	0	0	0	
SW47	1	Reserved											0	
	2	Reserved											0	
	3	Reserved											0	
	4	Reserved											0	
	5	Reserved											0	
	6	Reserved											0	
	7	Reserved											0	
	8	Reserved											1	
SW48	1	Reserved											1	
	2	Reserved											0	
	3	Reserved											0	
	4	Reserved											0	
	5	Reserved											1	
	6	Reserved											1	
	7	Reserved											0	
	8	Reserved											0	
SW49	1	Reserved											1	
	2	Reserved											0	
	3	Reserved											0	
	4	Reserved											0	
	5	Reserved											1	
	6	Reserved											0	
	7	Reserved											0	
	8	Reserved											0	

SW NO.	DATA NO.	ITEM	Switch setting and function						Initial setting	Remarks
			1			0				
SW50		DTMF detection time		50ms		80ms	100ms	120ms		
	1		No. 1	0		0	1	1	0	
	2		No. 2	0		1	0	1	0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW51	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
		Busy tone detection frequency		520~640Hz	300~600Hz	380~500Hz	reserve	reserve		
	4		No. 4	0	0	0	0	1	0	
	5		No. 5	0	0	1	1	0	0	
	6		No. 6	0	1	0	1	0	0	
	7	Reserved							0	
	8	Reserved							0	
SW52	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW53	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW54	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW55	1	Reserved							0	
	2	Reserved							0	
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	

SW NO.	DATA NO.	ITEM	Switch setting and function					Initial setting	Remarks
			1		0				
SW56	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW57	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW58	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW59	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW60	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW61	1	F.A.S.T. (RMS) mode	On		Off			0	
	2	F.A.S.T. (RMS) line	Line-2		Line-1			0	
	3	Verification stamp	Yes		No			0	
	4	Day light saving	No		Yes			1	
		Key buzzer volume		Off	High	Low	Low		
	5		No. 5	0	0	1	1	1	
	6		No. 6	0	1	0	1	0	
	7	Reserved						0	
	8	Reserved						0	

SW NO.	DATA NO.	ITEM	Switch setting and function						Initial setting	Remarks
			1			0				
SW62		Speaker volume			High	High	Middle	Low		
	1		No. 1		0	0	1	1	1	
	2		No. 2		0	1	0	1	1	
	3	Reserved							1	
	4	Reserved							0	
		Ringer volume			Off	High	Middle	Low		
	5		No. 5		0	0	1	1	1	
	6		No. 6		0	1	0	1	1	
	7	Reserved							0	
	8	Reserved							0	
SW63	1	Reserved							0	
	2	PC I/F mode	On			Off			1	OPTION
	3	Reserved							0	
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Reserved							0	
SW64	1	Header registration	On			Off			0	
	2	Reserved							0	
	3	Continuous serial polling	On			Off			0	
		Time interval for continuous serial polling			0 min.	30 min.	60 min.	120 min.		When SW64-No.3
	4		No. 4		0	0	1	1	0	is on, option setting
	5		No. 5		0	1	0	1	0	can be set up
	6	Reserved							0	
	7	Reserved							0	
	8	Quick on-line function	Yes			No			1	
SW65		Cassette selection			Manual	Auto-1	Auto-2	Auto-1		OPTION
	1		No. 1		0	0	1	1	0	
	2		No. 2		0	1	0	1	1	
		The 1st priority cassette		None	Tray	1st Cass.	2nd Cass.	Tray		OPTION
	3		No. 3	0	0	0	0	Other	0	It is effective
	4		No. 4	0	0	1	1	Combination	1	only when
	5		No. 5	0	1	0	1		0	No.31-1/2 are set up of manual
		The 2nd priority cassette		None	Tray	1st Cass.	2nd Cass.	Tray		OPTION
	6		No. 6	0	0	0	0	Other	0	It is effective
	7		No. 7	0	0	1	1	Combination	1	only when
	8		No. 8	0	1	0	1		1	No.31-1/2 are set up of manual
SW66		The 3rd priority cassette		None	Tray	1st Cass.	2nd Cass.	Tray		OPTION
	1		No. 1	0	0	0	0	Other	0	It is effective
	2		No. 2	0	0	1	1	Combination	0	only when
	3		No. 3	0	1	0	1		1	No.31-1/2 are set up of manual
	4	Reserved							0	
	5	Reserved							0	
	6	Reserved							0	
	7	Reserved							0	
	8	Print hold function	On			Off			0	

SW NO.	DATA NO.	ITEM	Switch setting and function				Initial setting	Remarks
			1		0			
SW67		Heater mode		Always on	Always off	Off timer		OPTION
	1		No.1	0	0	1	0	
	2		No.2	0	1	0	1	
		Density adjustment of print bias	Binary input 4 2 1					set to 1~7.
	3		No. = 3 4 5 (Data No.) 1: faint 6: deep				1	set to 0, is
	4		EX 1 0 0				0	equal to 4
	5		eg. Bias is set to level 4.				0	(100)
	6	Reserved					0	
	7	Reserved					0	
	8	Reserved					0	
SW68	1	The default resolution for copying	Super Fine		Fine		0	OPTION
	2	Reserved					0	
	3	Reserved					0	
		Line for relay TX		AUTO	Line-1	Line-2	Not use(AUTO)	
	4		No. 4	0	0	1	1	0
	5		No. 5	0	1	0	1	0
	6	Reserved					0	
	7	Reserved					0	
	8	Reserved					0	
SW69	1	Reserved					0	
	2	Reserved					1	
	3	Reserved					1	
	4	Reserved					1	
	5	Reserved					0	
	6	Reserved					1	
	7	Reserved					1	
	8	Reserved					0	
SW70	1	Reserved					0	
	2	Reserved					0	
	3	Reserved					1	
	4	Reserved					0	
	5	Reserved					0	
	6	Reserved					0	
	7	Reserved					0	
	8	Reserved					1	
SW71	1	Delay time after PC printing	Binary input 128 64 32 16 8 4 2 1				0	
	2	(n second)	No. = 1 2 3 4 5 6 7 8 (Data No.)				0	
	3		EX 0 0 0 0 0 1 1 0 (= 6 sec)				0	
	4						0	
	5						0	
	6						1	
	7						1	
	8						0	
SW72	1	Reserved					0	
	2	Reserved					0	
	3	Reserved					0	
	4	Reserved					0	
	5	Reserved					0	
	6	Reserved					0	
	7	Reserved					0	
	8	Reserved					0	

SW NO.	DATA NO.	ITEM	Switch setting and function								Initial setting	Remarks
			1			0						
SW73	1	Reserved									0	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									0	
		Data reduction		AUTO	100%							
	6	(Except notation: Setting prohibition)	No. 6	0	1	Set up to 100% except the notation					0	
	7		No. 7	0	0						0	
	8		No. 8	0	0						0	
SW74	1	Automatic printing of activity report	Yes (When momory full)			No (First data is cleared when memory full)					0	OPTION
	2	Print out of total time and total number of pages on activity report	Off			On					0	
	3	Reserved									0	
	4	Department function	On			Off					0	
	5	Department ID digit	Binary inout 8 4 2 1								0	OPTION
	6		No. = 5 6 7 8 (Data No.)								1	set to 3~9
	7		EX 0 1 0 0								0	
	8		eg. Department ID is set to 4 digits								0	
SW75	1	Picture quality priority mode	Fine			Standard					0	OPTION
	2	Cut-off mode (when copy mode)	Continue			Cut-off					0	OPTION
	3	Scanning ratio in momory input	1 : 1			Reduce					0	Memory scanning
	4	Overseas communication mode selection function	Yes			No					0	
	5	Reserved									0	
		Reduce ratio when copy mode		AUTO	100%							
	6	(Except notation: Setting prohibition)	No. 6	0	1	Set up to 100% except the notation					1	
	7		No. 7	0	0						0	
	8		No. 8	0	0						0	
SW76	1	Reserved									0	
	2	Reserved									0	
		Density adjustment (when Fine/STD mode)		Normal	Faint	Deep	Deep (when Dark mode)					
	3		No. 3	0	0	1	1				0	
	4		No. 4	0	1	0	1				0	
		Density adjustment (when Half-tone mode)		Normal	Faint	Deep	Deep (when Dark mode)					
	5		No. 5	0	0	1	1				0	
	6		No. 6	0	1	0	1				0	
	7	MTF correction in half-tone mode	On			Off					1	
	8	MTF intensity in half-tone mode	Strong			Weak					0	
SW77	1	Cassette define LTR/A4: Tray	A4			LTR					0	
	2	Cassette define LTR/A4: Upper	A4			LTR					0	
	3	Cassette define LTR/A4: Lower	A4			LTR					0	
	4	Reserved									0	
	5	Reserved									0	
		Dial selection	Line-1	TX/RX	TX/RX	TX/RX	RX	RX	TX	TX		
			Line-2	TX/RX	RX	TX	TX/RX	TX	TX/RX	RX		
	6		No. 6	0	0	0	0	1	1	1	0	
	7		No. 8	0	0	1	1	0	0	1	0	
	8		No. 8	0	1	0	1	0	1	0	0	
SW78	1	Reserved									1	
	2	Reserved									0	
	3	Reserved									0	
	4	Reserved									0	
	5	Reserved									0	
	6	Reserved									0	
	7	Reserved									0	
	8	Reserved									1	

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW79	1	Secure billing code	Yes	No	0	
	2	Pause with SHIFT key	Yes	No	0	
	3	Reserved			0	
	4	Z key pause time	Binary input 16 8 4 2 1		0	
	5	(250ms unit)	No. = 4 5 6 7 8 (Data No.)		0	
	6		EX 0 0 0 0 0		0	
	7		eg. Pause time 250ms		0	
	8		Time=(n+1) x 250ms		0	
SW80	1	Separate feature	On	Off	0	
	2	Reserved			0	
	3	Reserved			0	
	4	Use personal book name as multi TTI	Yes	No	0	
	5	Addition of header (Sender information)	On	Off	1	
	6	DTMF sending by the panel test	On	Off	0	
	7	Power save mode	Real time	Timer	1	
	8	Ring control for line-2	On	Off	0	
SW81	1	Reserved			1	
	2	Reserved			0	
	3	Reserved			1	
	4	Reserved			1	
	5	Reserved			1	
	6	Reserved			1	
	7	Reserved			1	
	8	Reserved			1	
SW82	1	Reserved			0	
	2	Reserved			1	
	3	Reserved			0	
	4	Reserved			1	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW83	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			1	
	7	Reserved			0	
	8	Reserved			1	
SW84	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			1	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			1	
SW85	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW86	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			1	
	5	Reserved			0	
	6	Reserved			1	
	7	Reserved			1	
	8	Reserved			1	
SW87	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW88	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW89	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW90	1	Reserved			0	
	2	Reserved			1	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			1	
	7	Reserved			0	
	8	Reserved			1	
SW91	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW92	1	Reserved			0	
	2	Reserved			1	
	3	Waiting time after dialing	90sec	The specification of each country is followed	0	
	4	Show receiver's name	Yes (Show)	No (Hide)	1	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW93	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW94	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW95	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			1	
	6	Reserved			1	
	7	Reserved			0	
	8	Reserved			1	
SW96	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW97	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW98	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			0	
	8	Reserved			0	
SW99	1	Reserved			0	
	2	Reserved			0	
	3	Reserved			0	
	4	Reserved			0	
	5	Reserved			0	
	6	Reserved			0	
	7	Reserved			1	
	8	Reserved			1	

• Soft switch function description

SW1 No. 1 ~ No. 4 Recall interval

Choice is made for a recall interval for speed and rapid dial numbers. Use a binary number to program this. If set to 0 accidentally, 1 will be assumed.

SW1 No. 5 ~ No. 8 Recall times

Choice is made as to how many recall times should be made. Use a binary number to program this.

SW2 No. 1 Dial mode

Switch the type according to the telephone circuit connected to the facsimile.

0: PULSE DIAL

1: TONE DIAL

SW2 No. 2 Receive mode

Auto/manual receiving mode is set.

SW2 No. 3 ECM mode

Used to determine ECM mode function.

SW2 No. 4 Reserved

Set to "0".

SW2 No. 5 Polling security

This switch is employed to enable or disable the polling operation using the ID code verification function, in order to prevent unauthorized polling operation.

SW2 No. 6 Auto cover sheet

When "1" (=YES) is selected, the cover sheet is automatically sent after transmission of the original to notify the receiver of the number of original sheets transmitted.

SW2 No. 7 JUNK-FAX function in manual reception

It is set whether JUNK-FAX is functioned in the manual receiving mode or not.

SW2 No. 8 JUNK-FAX function

This function is used to receive data from a specific remote machine (station registered in entry mode). It is the function that refused a reception in the case that TSI of remote machine matched with fax number of the station registered.

0: No

1: Yes

SW3 No. 1 ~ No. 4 Number of rings for auto-receive (0: No ring receive)

When the machine is set in the auto receive mode, the number of rings before answering can be selected. It may be set from one to nine rings using a binary number. If the soft switch was set to 1, a direct connection is made to the facsimile. If it was set to 0 accidentally, receive ring is set to 1. If it was above 9, receive rings are set to 9.

SW3 No. 5 ~ No. 8 Switch to auto-receive from manual receive (0: No switch)

This setting allows machine to switch from manual to Auto Receive mode. Setting this number to 0 forces machine to stay in Manual receive mode. Entering the binary number 0 forces the machine to remain in the manual answer mode. If a number between 1 and 9 is entered, the machine will go into the answer mode after the given number of rings. However, it can be used as an ordinary telephone if the handset is taken off the hook before this programmed number is finished. If entry of a number above 9 by accident, it will be set to 9. In this case, it must be corrected to the proper number.

SW4 No. 1 ~ No. 3 Communication results printout

It is possible to obtain communication results after each transaction. Normally, the switch is set (No. 1: 0, No. 2: 0, No. 3: 1) so that the communication result is produced only a communication error is encountered. If No. 1 was set to 1, No. 2 was set to 1 and No. 3 was set to 0, the communication result will be produced every time a communication is done, even if the communication was successful.

If No. 1 was set to 0, No. 2 to 1 and No. 3 to 0, the communication result will be produced every transmission.

Setting No. 1 to 1 No. 2 to 0 and No. 3 to 0 will disable this function. No transaction report will be printed.

If No. 1 was set to 0, No. 2 to 0 and No. 3 to 0, the communication result is produced only after a timer and memory transmission or when a communication error is encountered.

SW4 No. 4 Image addition function to the communication result table (for memory transmission only)

Used to set addition of sending image to the communication result table.

SW4 No. 5 Reserved

Set to "0".

SW4 No. 6 TEL billing code function

When set to "1", the TEL billing code function is enabled.

SW4 No. 7 Billing code position

When set to "1", the billing code is delivered before dialing the remote number. When set to "0", the billing code is delivered after dialing.

SW4 No. 8 Multi-TTI feature

When this switch is set to "1", Multi TTI function is enabled.

SW5 No. 1 Time display format

When this switch is set to "0", time is displayed in 12-hour system.

When set to "1", 24-hour system.

SW5 No. 2 Date display format

Used to select date display/print formats.

0: DAY-Month-Year

1: Month-DAY-Year

SW5 No. 3 Header print

When it is set at 0, sender's name, sending page number and so on are automatically printed in the recording paper on the receiving side during transmission. Thus, the sender can be known on the receiving side.

0: Applied.

1: Not applied.

SW5 No. 4 Footer print

When set to "1", the date of reception, the sender machine No., and the page No. are automatically recorded at the end of reception.

SW5 No. 5 Relay data output

0: Output ON

1: Output OFF

SW5 No. 6 Substitute reception

Selection of substitute reception in the case of recording paper ex-hausted or paper jam. If set to "NO", auto receive is disabled even when the receive memory is ready to receive.

Substitute reception is not performed even during receive operation.

SW5 No. 7 Substitute reception conditions

Selection of substitute reception according to existence of TEL number from transmitting side. Initial setting allows substitute reception without CSI. If set to "no", the receiver cannot receive any documents

SW5 No. 8 CSI transmission

CSI signal contains the sender's phone number registered in the machine. If this switch is set to "1", no sender's name will be printed at the receiving side.

SW6 No. 1 JBIG (Joint Bi-level Image Group)

An image compression encoding method recommended by ITU-T. It realizes 2-second transmission when the power is turned on.

SW6 No. 2 JBIG option

An optional function for JBIG.

SW6 No. 3 MMR

MMR (Modified MR) selects presence of the compression function.

SW6 No. 4 MR

MR (Modified READ) selects presence of the compression function.

SW6 No. 5 ~ No. 8 Modem speed

Used to determine the initial modem speed. The default is 14400BPS(V.17). It may be necessary to program it to a slower speed when frequent line fallback is encountered, in order to save the time required for the fallback procedure.

SW7 No. 1, No. 2 Reception speed fixed

The transferable speed of modem in the receiving mode is set.

SW7 No. 3 DIS receive acknowledge during G3 transmission

Used to make a choice of whether reception of NSF (DIS) is acknowledged after receiving two NSFs (DISs) or receiving one NSF (two DISs).

It may be useful for overseas communication to avoid an echo suppression problem, if set to 1.

SW7 No. 4 Non-modulated carrier in V.29 transmission mode

Though transmission of a non-modulated carrier is not required for transmission by the V29 modem according to the CCITT Recommendation, it may be permitted to send a non-modulated carrier before the image signal to avoid an echo suppression problem. It may be useful for overseas communication to avoid an echo sup-pression problem, if set to 1.

SW7 No. 5 CNG send when manual TX

CNG signal sending ON/OFF in case of manual transmission is set.

SW7 No. 6 Protocol monitor

Normally set to "0". If set to "1", communication can be checked, in case of troubles, without using a G3 tester or other tools.

When communication FSK data transmission or reception is made, the data is taken into buffer. When communication is finished, the data analyzed and printed out. When data is received with the line monitor (SW7-No. 7) set to "1" the reception level is also printed out.

SW7 No. 7 Line monitor

Normally set to "0". If set to "1", the transmission speed and the reception level are displayed on the LCD. Used for line tests.

SW7 No. 8 Max. length for TX/RX/Copy

Used to set the maximum page length.

To avoid possible paper jam, the page length is normally limited to 432 mm for copy or transmit, and 1.5 meters for receive.

It is possible to set it to "No limit" to transmit/receive a long document, such as a computer print form, etc. (In this case, the receiver/transmitter must also be set to no limit.)

SW8 No. 1, No. 2 Compromised equalizer

The specific line equalizer is inserted.

No. 1	No. 2	
0	0	The line equalizer built in the modem is turned off.
0	1	Line equalizer corresponding to 1.8 km
1	0	Line equalizer corresponding to 3.6 km
0	1	Line equalizer corresponding to 7.2 km

SW8 No. 3 H2 mode

Used to determine H2 mode (15sec transmission mode). When set to OFF, H2 mode is inhibited even though the transmitting machine has H2 mode.

SW8 No. 4 ~ No. 8 Signal transmission level

Used to control the signal transmission level in the range of –0dB to –31dB.

SW9 No. 1, No. 2 CED tone signal interval

For international communication, the 2100Hz CED tone may act as an echo suppresser switch, causing a communication problem. Though this soft switch is normally set to "0", it should be set to "1" so as to change the time between CED tone and DIS signal from 75ms to 500ms to eliminate the communication problem caused by echo.

SW9 No. 3 Equalizer freeze

This switch is used to perform reception operation by fixing the equalizer control of modem for the line which is always in an unfavorable state and picture cannot be received. Usually, the control is executed according to the state of line where the equalizer setting is changed always.

SW9 No. 4 Equalizer freeze conditions

Setting which specifies SW9 No.3 control only in condition of 7200bps modem speed.

SW9 No. 5 CED detection time

The detection time of the CED signal from the called side in the auto calling mode is set.

SW9 No. 6, No. 7 Alarm buzzer

The length of the buzzer for normal end of operation is set.

SW9 No. 8 Action when RTN received

The operation is set when the RTN signal is received in the G3 transmission mode.

SW10 No. 1 ~ No. 4 Memory retransmission times

The number of memory retransmissions is set.

SW10 No. 5 ~ No. 8 Memory retransmission interval

The interval between memory retransmissions is set.

SW11 No. 1 ~ No. 4 V.34 mode transmission speed

Used to determine the initial modem speed when communication method is V.34 transmission mode.

SW11 No. 5 ~ No. 8 V.34 mode receiving speed

Used to determine the initial modem speed when communication method is V.34 reception mode.

SW12 No. 1 V.34 mode function in case of manual communication

Used to select whether the V.34 mode is made valid when automatically transmitting/receiving.

SW12 No. 2 V.34 mode function

Used to select the V.34 mode for communication when set to “1”, communication method is V.34 mode..

SW12 No. 3 V.34 control channel communication speed

Used to select the control channel communication speed for V.34 mode.

SW12 No. 4, No. 5 EOL detection timer

Used to make a choice of whether to use the 25-second or 13-second timer for detection of End of line This is effective to override communication failures with some facsimile models that have longer End of line detection.

SW12 No. 6, No. 7 Processing of DIS reception after DIS transmission

When receiving , operation in case of DIS reception after DIS transmission is selected. Retransmitting command: To retransmit DIS in disregard of DIS reception.
Breaking circuit: To break circuit instantly. (Abnormal finish)
T. 30: To operate in accordance with T.30.
T. 30+α: To operate in accordance with T.30+α. (To operate differently according to cases.)

SW12 No. 8 The change to DB from DP by ✳

When setting to 1, the mode is changed by pressing the ✳ key from the pulse dial mode to the tone dial mode.

SW13 No. 1 ~ No. 5 DTMF output level (High)

To set the level to output high group DTMF signals. –15 to 0 dBm (0.5 dBm unit)

SW13 No. 6 ~ No. 8 Reserved

Set to "0".

SW14 No. 1 ~ No. 5 DTMF output level (Low)

To set the level to output low group DTMF signals. –15 to 0 dBm (0.5 dBm unit)

SW14 No. 6 ~ No. 8 Reserved

Set to "0".

SW15 No. 1 ~ No. 4 Reserved

Set to "0".

SW15 No. 5 ~ No. 8 CI signal OFF detect enable time

Used to set the continuous detection time during OFF period of CI signal.

SW16 No. 1 ~ No. 4 Reserved

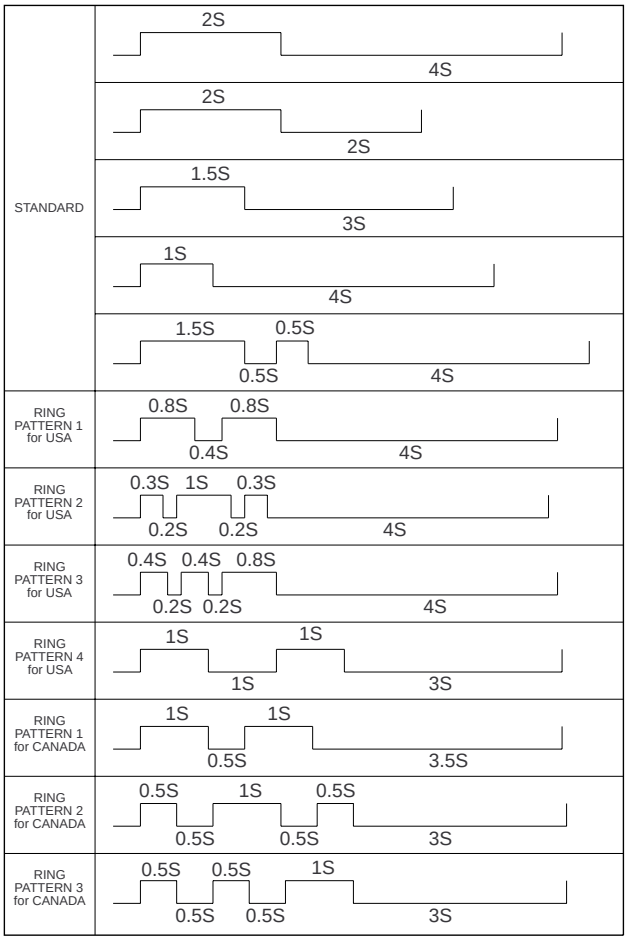
Set to "0".

SW16 No. 5 ~ No. 8 Distinctive ringing

When the ringing setting is turned off, all of the CI signal are received. When any of the standard, and ring patterns 1 through 3 is selected for the ringing setting, only the selected CI signal is received.

CI signal patterns

The CI signal patterns consists of the standard pattern, and ring patterns 1 through 7. The standard pattern is the conventional one.



SW17 No. 1 ~ No. 7 Reserved

Set to "0".

SW17 No. 8 Reserved

Set to "1".

SW18 No. 1 Reserved

Set to "1".

SW18 No. 2 ~ No. 4 Reserved

Set to "0".

SW18 No. 5 , No. 6 Reserved

Set to "1".

SW18 No. 7 , No. 8 Reserved

Set to "0".

SW19 No. 1 Reserved

Set to "1".

SW19 No. 2 ~ No. 4 Reserved

Set to "0".

SW19 No. 5 Reserved

Set to "1".

SW19 No. 6 ~ No. 8 Reserved

Set to "0".

SW20 No. 1 ~ No. 8 Reserved

Set to "0".

SW21 No. 1 ~ No. 3 Reserved

Set to "0".

SW21 No. 4 ~ No. 6 Busy tone detection frequency

To select frequency range of signals to be detected as Busy Tone.

SW21 No. 7, No. 8 Reserved

Set to "0".

SW22 No. 1 ~ No. 8 Reserved

Set to "0".

SW23 No. 1 ~ No. 8 Reserved

Set to "0".

SW24 No. 1 ~ No. 8 Reserved

Set to "0".

SW25 No. 1 ~ No. 8 Reserved

Set to "0".

SW26 No. 1 ~ No. 8 Reserved

Set to "0".

SW27 No. 1 ~ No. 8 Reserved

Set to "0".

SW28 No. 1 ~ No. 8 Reserved

Set to "0".

SW29 No. 1 ~ No. 8 Reserved

Set to "0".

SW30 No. 1 ~ No. 8 Reserved

Set to "0".

SW31 No. 1 Reserved

Set to "0".

SW31 No. 2 Reserved

Set to "1".

SW31 No. 3 Reserved

Set to "0".

SW31 No. 4 Reserved

Set to "1".

SW31 No. 5, No. 6 Reserved

Set to "0".

SW31 No. 7 Reserved

Set to "1".

SW31 No. 8 Reserved

Set to "0".

SW32 No. 1 Dial mode

Switch the type according to the telephone circuit connected to the facsimile.

0: PULSE DIAL

1: TONE DIAL

SW32 No. 2 Reserved

Set to "1".

SW32 No. 3, No. 4 Reserved

Set to "0".

SW32 No. 5, No. 6 Reserved

Set to "1".

SW32 No. 7, No. 8 Reserved

Set to "0".

SW33 No. 1 ~ No. 4 Number of rings for auto-receive (0: No ring receive)

When the machine is set in the auto receive mode, the number of rings before answering can be selected. It may be set from one to nine rings using a binary number. If the soft switch was set to 1, a direct connection is made to the facsimile. If it was set to 0 accidentally, receive ring is set to 1. If it was above 9, receive rings are set to 9.

SW33 No. 5 ~ No. 8 Reserved

Set to "0".

SW34 No. 1, No. 2 Reserved

Set to "0".

SW34 No. 3, No. 4 Reserved

Set to "1".

SW34 No. 5, No. 6 Reserved

Set to "0".

SW34 No. 7 Reserved

Set to "1".

SW34 No. 8 Reserved

Set to "0".

SW35 No. 1 Reserved

Set to "0".

SW35 No. 2 Reserved

Set to "1".

SW35 No. 3 ~ No. 8 Reserved

Set to "0".

SW36 No. 1 JBIG (Joint Bi-level Image Group)

An image compression encoding method recommended by ITU-T. It realizes 2-second transmission when the power is turned on.

SW36 No. 2 JBIG option

An optional function for JBIG.

SW36 No. 3 MMR

MMR (Modified MR) selects presence of the compression function.

SW36 No. 4 MR

MR (Modified READ) selects presence of the compression function.

SW36 No. 5 ~ No. 8 Modem speed

Used to determine the initial modem speed. The default is 14400BPS(V.17). It may be necessary to program it to a slower speed when frequent line fallback is encountered, in order to save the time required for the fallback procedure.

SW37 No. 1, No. 2 Reception speed fixed

The transferable speed of modem in the receiving mode is set.

SW37 No. 3 DIS receive acknowledge during G3 transmission

Used to make a choice of whether reception of NSF (DIS) is acknowledged after receiving two NSFs (DISs) or receiving one NSF (two DISs).

It may be useful for overseas communication to avoid an echo suppression problem, if set to 1.

SW37 No. 4 Non-modulated carrier in V.29 transmission mode

Though transmission of a non-modulated carrier is not required for transmission by the V29 modem according to the CCITT Recommendation, it may be permitted to send a non-modulated carrier before the image signal to avoid an echo suppression problem.

It may be useful for overseas communication to avoid an echo suppression problem, if set to 1.

SW37 No. 5 CNG send when manual TX

CNG signal sending ON/OFF in case of manual transmission is set.

SW37 No. 6 Protocol monitor

Normally set to "0". If set to "1", communication can be checked, in case of troubles, without using a G3 tester or other tools.

When communication FSK data transmission or reception is made, the data is taken into buffer. When communication is finished, the data analyzed and printed out. When data is received with the line monitor (SW7-No. 7) set to "1" the reception level is also printed out.

SW37 No. 7 Line monitor

Normally set to "0". If set to "1", the transmission speed and the reception level are displayed on the LCD. Used for line tests.

SW37 No. 8 Reserved

Set to "0".

SW38 No. 1, No. 2 Compromised equalizer

The specific line equalizer is inserted.

No. 1	No. 2	
0	0	The line equalizer built in the modem is turned off.
0	1	Line equalizer corresponding to 1.8 km
1	0	Line equalizer corresponding to 3.6 km
0	1	Line equalizer corresponding to 7.2 km

SW38 No. 3 H2 mode

Used to determine H2 mode (15sec transmission mode). When set to OFF, H2 mode is inhibited even though the transmitting machine has H2 mode.

SW38 No. 4 ~ No. 8 Signal transmission level

Used to control the signal transmission level in the range of –0dB to –31dB.

SW39 No. 1, No. 2 CED tone signal interval

For international communication, the 2100Hz CED tone may act as an echo suppresser switch, causing a communication problem. Though this soft switch is normally set to "0", it should be set to "1" so as to change the time between CED tone and DIS signal from 75ms to 500ms to eliminate the communication problem caused by echo.

SW39 No. 3 Equalizer freeze

This switch is used to perform reception operation by fixing the equalizer control of modem for the line which is always in an unfavorable state and picture cannot be received. Usually, the control is executed according to the state of line where the equalizer setting is changed always.

SW39 No. 4 Equalizer freeze conditions

Setting which specifies SW9 No.3 control only in condition of 7200bps modem speed.

SW39 No. 5 CED detection time

The detection time of the CED signal from the called side in the auto calling mode is set.

SW39 No. 6 ~ No. 8 Reserved

Set to "0".

SW40 No. 1 Reserved

Set to "1".

SW40 No. 2 Reserved

Set to "0".

SW40 No. 3 Reserved

Set to "1".

SW40 No. 4 ~ No. 6 Reserved

Set to "0".

SW40 No. 7 Reserved

Set to "1".

SW40 No. 8 Reserved

Set to "0".

SW41 No. 1 ~ No. 4 V.34 mode transmission speed

Used to determine the initial modem speed when communication method is V.34 transmission mode.

SW41 No. 5 ~ No. 8 V.34 mode receiving speed

Used to determine the initial modem speed when communication method is V.34 reception mode.

SW42 No. 1 Reserved

Set to "1".

SW42 No. 2 V.34 mode function

Used to select the V.34 mode for communication when set to “1”, communication method is V.34 mode..

SW42 No. 3 V.34 control channel communication speed

Used to select the control channel communication speed for V.34 mode.

SW42 No. 4, No. 5 EOL detection timer

Used to make a choice of whether to use the 25-second or 13-second timer for detection of End of line This is effective to override communication failures with some facsimile models that have longer End of line detection.

SW42 No. 6, No. 7 Processing of DIS reception after DIS transmission

When receiving , operation in case of DIS reception after DIS transmission is selected. Retransmitting command: To retransmit DIS in disregard of DIS reception.
Breaking circuit: To break circuit instantly. (Abnormal finish)
T. 30: To operate in accordance with T.30.
T. 30+α: To operate in accordance with T.30+α. (To operate differently according to cases.)

SW42 No. 8 The change to DB from DP by ✳

When setting to 1, the mode is changed by pressing the ✳ key from the pulse dial mode to the tone dial mode.

SW43 No. 1 ~ No. 5 DTMF output level (High)

To set the level to output high group DTMF signals. –15 to 0 dBm (0.5 dBm unit)

SW43 No. 6 ~ No. 8 Reserved

Set to "0".

SW44 No. 1 ~ No. 5 DTMF output level (Low)

To set the level to output low group DTMF signals. –15 to 0 dBm (0.5 dBm unit)

SW44 No. 6 ~ No. 8 Reserved

Set to "0".

SW45 No. 1 ~ No. 4 Frequency of CI signal

Used to set the detection frequency of CI signal.

SW45 No. 5 ~ No. 8 CI signal off detect enable time

Used to set the continuous detection time during OFF period of CI signal. Normally set to 700ms, where the short ring (500ms: OFF period) cannot be detected. Therefore, selection of 350ms is allowed.

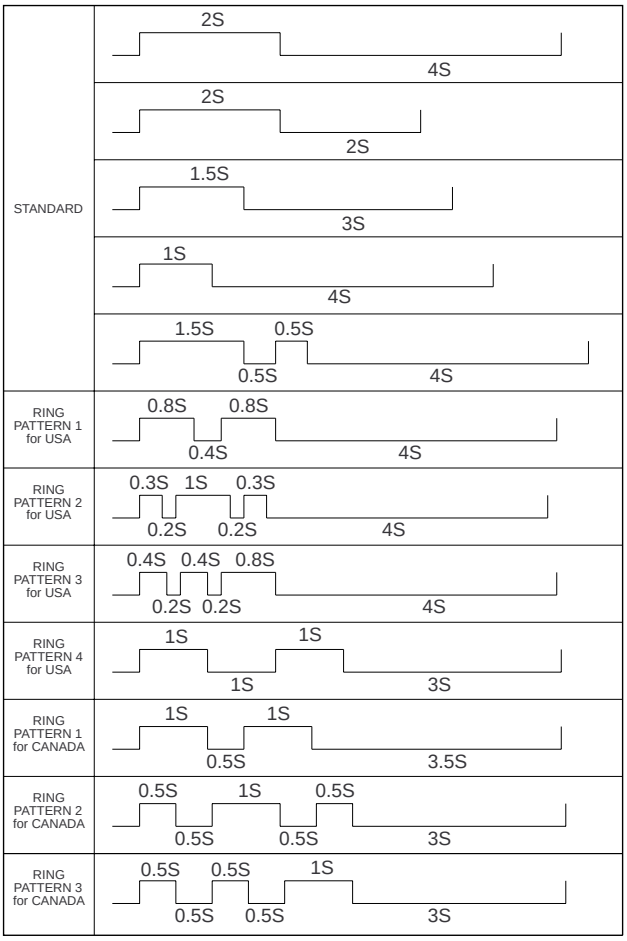
SW46 No. 1 ~ No. 4 Reserved

Set to "0".

SW46 No. 5 ~ No. 8 Distinctive ringing

When the ringing setting is turned off, all of the CI signal are received. When any of the standard, and ring patterns 1 through 3 is selected for the ringing setting, only the selected CI signal is received.

CI signal patterns
The CI signal patterns consists of the standard pattern, and ring patterns 1 through 7. The standard pattern is the conventional one.



SW47 No. 1 ~ No. 7 Reserved

Set to "0".

SW47 No. 8 Reserved

Set to "1".

SW48 No. 1 Reserved

Set to "1".

SW48 No. 2 ~ No. 4 Reserved

Set to "0".

SW48 No. 5, No. 6 Reserved

Set to "1".

SW48 No. 7, No. 8 Reserved

Set to "0".

SW49 No. 1 Reserved

Set to "1".

SW49 No. 2 ~ No. 4 Reserved

Set to "0".

SW49 No. 5 Reserved

Set to "1".

SW49 No. 6 ~ No. 8 Reserved

Set to "0".

SW50 No. 1, No. 2 DTMF detection time

Used to set detect time of DTMF (Dual Tone Multi Frequency) used in remote reception (5 ✕ ✕). The longer the detection time is, the error detection is caused by noises.

SW50 No. 3 ~ No. 8 Reserved

Set to "0".

SW51 No. 1 ~ No. 3 Reserved

Set to "0".

SW51 No. 4 ~ No. 6 Busy tone detection frequency

To select frequency range of signals to be detected as Busy Tone.

SW51 No. 7, No. 8 Reserved

Set to "0".

SW52 No. 1 ~ No. 8 Reserved

Set to "0".

SW53 No. 1 ~ No. 8 Reserved

Set to "0".

SW54 No. 1 ~ No. 8 Reserved

Set to "0".

SW55 No. 1 ~ No. 8 Reserved

Set to "0".

SW56 No. 1 ~ No. 8 Reserved

Set to "0".

SW57 No. 1 ~ No. 8 Reserved

Set to "0".

SW58 No. 1 ~ No. 8 Reserved

Set to "0".

SW59 No. 1 ~ No. 8 Reserved

Set to "0".

SW60 No. 1 ~ No. 8 Reserved

Set to "0".

SW61 No. 1 F.A.S.T (RMS) mode

Used to determine a function of remote maintenance system (F.A.S.T).

SW61 No. 2 F.A.S.T (RMS) line

The line where the F.A.S.T. function is set.

SW61 No. 3 Verification stamp

End stamp:
It is set whether the red round mark is stamped at the bottom margin of the document of every page in the memory input mode and document sending mode or not.

SW61 No. 4 Day light saving

The day light saving function ON/OFF is set.

SW61 No. 5, No. 6 Key buzzer volume

Key buzzer volume:
The sound volume of key inputting buzzer and other buzzers is set.

SW61 No. 7, No. 8 Reserved

Set to "0".

SW62 No. 1, No. 2 Speaker volume

Speaker volume:
The sound volume of the speaker in the on-hook mode is set.

SW62 No. 3 Reserved

Set to "1".

SW62 No. 4 Reserved

Set to "0".

SW62 No. 5, No. 6 Ringer volume

Ringer volume:
The calling sound volume of CI signal receiving is set.

SW62 No. 7, No. 8 Reserved

Set to "0".

SW63 No. 1 Reserved

Set to "0".

SW63 No. 2 PC I/F mode

The interface with the personal computer is selected.

SW63 No. 3 ~ No. 8 Reserved

Set to "0".

SW64 No. 1 Header registration

When setting this switch to "1", registering senders is protected.

SW64 No. 2 Reserved

Set to "0".

SW64 No. 3 Continuous serial polling

Turns ON/OFF the continuous polling function.

SW64 No. 4, No. 5 Time interval for continuous serial polling

Used to set the interval time for continuous serial polling. Normally set to no interval (0 minute).

SW64 No. 6, No. 7 Reserved

Set to "0".

SW64 No. 8 Quick on-line function

It is selected whether auto dial call is activated in the memory input mode when one document is completely read or when all pages are completely read.

SW65 No. 1, No. 2 Cassette selection

To set selective modes for detail paper cassettes of the printer.

00:	Manual	To select detail paper in the first priority cassette in accordance with setting by SW65 3-8 and SW65 1-3. If the detail paper in the first priority cassette runs short, the second priority cassette will be used.
01:	Automatic 1	To automatically select detail paper with optimum size among the first to third priority cassettes in accordance with setting by SW65 3-8 and SW65 1-3. The optimum paper is selected by every page. If all the cassettes have the same size paper, paper will be selected according to the cassette priority.
10:	Automatic 2	To automatically select detail paper with optimum size among the first to third priority cassettes in accordance with setting by SW65 3-8 and SW65 1-3. At the start of printing, the optimum paper is adopted only for the first page. Thereafter the same cassette selected for the first page will be used from the second page and after. If all the cassettes have the same size paper, paper will be selected according to the cassette priority.
11:	Except the above	01: the same setting as in the case of Automatic 1

SW65 No. 3 ~ No. 5 The 1st priority cassette

To select the first priority cassette.

001:	1st paper feeder (MP-TRAY)
010:	2nd paper feeder
011:	3rd paper feeder
Except the above	Printing started from the possible paper feeder

SW65 No. 6 ~ No. 8 The 2nd priority cassette

To select the second priority cassette.

000:	Not used (To set in case of using only paper feeder that has been set in the first priority cassette)
001:	1st paper feeder (MP-TRAY)
010:	2nd paper feeder
011:	3rd paper feeder
Except the above	Not used

SW66 No. 1 ~ No. 3 The 3rd priority cassette

To select the third priority cassette.

000:	Not used (To set in case of using only paper feeder that has been set in the first /second priority cassette)
001:	1st paper feeder (MP-TRAY)
010:	2nd paper feeder
011:	3rd paper feeder
Except the above	Not used

SW66 No. 4 ~ No. 7 Reserved

Set to "0".

SW66 No. 8 Print hold function

When set to "1", the print hold function is enabled.

SW67 No.1, No. 2 Heater mode

Used to set ON/OFF of the heater. Three settings are available: always ON, always OFF, and OFF timer. (Only when Off timer is selected, SW34-SW37 settings are valid.)
To set performance of the heater at the printer fixing part.

00:	Normally ON (Off in case of Save Mode, giving priority to Energy Save Mode)
01:	Normally OFF
Except the above	Normally OFF

SW67 No. 3 ~ No. 5 Density adjustment of print bias

The density of printing is set.

It can be also set in the print diagnosis mode.

SW67 No. 6 ~ No. 8 Reserved

Set to "0".

SW68 No. 1 The default resolution for copying

In case of copying without pressing the RESOLUTION key, resolution will be super fine.

SW68 No. 2, No. 3 Reserved

Set to "0".

SW68 No. 4, No. 5 Line for relay TX

The line to be used for relay specification transmission is set. In case of AUTO setting the line specified in the transmission operation is used.

SW68 No. 6 ~ No. 8 Reserved

Set to "0".

SW69 No. 1 Reserved

Set to "0".

SW69 No. 2 ~ No. 4 Reserved

Set to "1".

SW69 No. 5 Reserved

Set to "0".

SW69 No. 6, No. 7 Reserved

Set to "1".

SW69 No. 8 Reserved

Set to "0".

SW70 No. 1, No. 2 Reserved

Set to "0".

SW70 No. 3 Reserved

Set to "1".

SW70 No. 4 ~ No. 7 Reserved

Set to "0".

SW70 No. 8 Reserved

Set to "1".

SW71 No. 1 ~ No. 8 Delay time after PC printing (n second)

To insert delay time after PC printing.

SW72 No. 1 ~ No. 8 Reserved

Set to "0".

SW73 No. 1 ~ No. 5 Reserved

Set to "0".

SW73 No. 6 ~ No. 8 Data reduction

Reduction ratio of receiving is set .
It can be changed even in the optional mode.
To set printing reduction rate of received images.

000:	Automatic
100:	100%
Except the above	100%

SW74 No. 1 Automatic printing of activity report

This soft switch is used to select; whether or not to produce the activity report when the memory is full (about 50 items). An activity report can be produced when the following key entry command is made.

"FUNC", "2", "#", "START"

After producing the activity report, all the data in the memory will be cleared.

When the switch function is set to "0" (NO), the data in memory will be deleted from the oldest as it reaches the maximum memory capacity (approx. 50 items).

SW74 No. 2 Printout of total time and total number of pages on activity report

Used to make a choice of whether the total communication time and pages are recorded in the activity report.

SW74 No. 3 Reserved

Set to "0".

SW74 No. 4 Department function

This model has the department audit feature, it has to be set to 1 to utilize this feature.

SW74 No. 5 ~ No. 8 Department ID digit

Used to set the department ID digit number .
When set to "D" , the number is "4" .

SW75 No. 1 Picture quality priority mode

Used to set the transmission mode which is automatically selected when the MODE key is not pressed. In the copy mode, however, the fine mode is automatically selected unless the MODE key is manually set to another mode.

SW75 No. 2 Cut-off mode (when copy mode)

When in copy, if the scanned data is out of the range of recording, the operator has one of the choices below using the switch.

0: Continue: Data is printed onto the next page with the last 20mm also printed at the beginning of the next page.

1: Cut off: Data scanned out of the limit is cut off (a page is printed.)

SW75 No. 3 Scanning ratio in memory input

In the case of memory transmission, etc., only letter size (A4) documents can be stored in the memory. To input B4 documents into the memory, therefore, the B4 documents must be reduced to letter size (A4) or the both ends of the B4 documents will be cut off to input the center letter-size (A4) portion. This switch provides the selection.

0: Reduced to A4 size and inputted.

1: Both ends are cut off and the center portion (A4 size) is inputted.

SW75 No. 4 Overseas communication mode selection function

When this switch is set to "1", the communication is Super G3 mode can be turned off by pressing the "SPACE" key before sending operation, for the transmission set after that (including polling).

SW75 No. 5 Reserved

Set to "0".

SW75 No. 6 ~ No. 8 Reduce ratio when copy mode

Reduction ratio of copying is set .
It can changed even in the optional mode.

SW76 No. 1, No. 2 Reserved

Set to "0".

SW76 No. 3, No. 4 Density adjustment (when Fine/STD mode)

This is used for density adjustment in fine/standard mode. Adjust the density according to that of frequently used original.

Set to "Dark" for darker reading (either in the auto or the dark mode) of light original. Set to "Light" for lighter reading (either in the auto or the dark mode) of dark original.

Set to "Dark only in dark mode" for darker reading only in the dark mode.

SW76 No. 5, No. 6 Density adjustment (when Half-tone mode)

This is used for density adjustment in the half tone. Setting procedures are the same as SW46 No. 3 and No. 4.

SW76 No. 7 MTF correction in Half-tone mode

In the half tone mode, image area is separated from character area and processed separately to eliminate unclear character transmission. This switch is used to change the criteria of judgement of separation. When "Strong" (= 1) is selected, more area is judged as character area, providing clearer characters.

On the contrary, however, edges of image area may be emphasized.

It is advisable to restrict the use of this function only when clear characters must be transmitted, and to use the function of "Weak" (= 0) for general cases.

SW76 No. 8 MTF intensity in Half-tone mode

This allows selection of MTF correction (dimness correction) in the half tone mode. When "NO" (= 1) is selected, the whole image becomes soft and mild, On the contrary, however, mildness of characters will be reduced. Normally set to "NO" (= 1).

SW77 No. 1 Cassette define LTR / A4:Tray

A4 cassette can be used .
Set "0" or "1" for all of three bits.
Do not change the setting during printing.

SW77 No. 2 Cassette define LTR / A4:Upper

A4 cassette can be used .
Set "0" or "1" for all of three bits.
Do not change the setting during printing.

SW77 No. 3 Cassette define LTR / A4:Lower

A4 cassette can be used .
Set "0" or "1" for all of three bits.
Do not change the setting during printing.

SW77 No. 4, No. 5 Reserved

Set to "0".

SW77 No. 6 ~ No. 8 Dial selection

The communication conditions of lines 1/2 are set respectively.

SW78 No. 1 Reserved

Set to "1".

SW78 No. 2 ~ No. 7 Reserved

Set to "0".

SW78 No. 8 Reserved

Set to "1".

SW79 No. 1 Secure billing code

When the tel. billing code function is ON, the operation of secure billing code is enabled .

SW79 No. 2 Pause with SHIFT key

The SHIFT key pause time is set.

SW79 No. 3 Reserved

Set to "0".

SW79 No. 4 ~ No. 8 Z key pause time (250ms unit)

The Z key pause time is set.

SW80 No. 1 Separate feature

The separate mode ON/OFF is set.

SW80 No. 2, No. 3 Reserved

Set to "0".

SW80 No. 4 Use personal book name as multi TTI

When this switch is set to “1”, personal book name is used as multi TTI.

SW80 No. 5 Addition of header (Sender information)

ON/OFF of addition of header (sender information) to various list is set.

SW80 No. 6 DTMF sending by the panel test

When ten keys are pressed in the Panel Test Mode of the diagnosis, the corresponding DTMF signals are output.

SW80 No. 7 Power save mode

To switch power save mode system either to real time or to timer.

SW80 No. 8 Ring control for line-2

The ringer ringing ON/OFF is set when incoming call is received through the line 2.

SW81 No. 1 Reserved

Set to "1".

SW81 No. 2 Reserved

Set to "0".

SW81 No. 3 ~ No. 8 Reserved

Set to "1".

SW82 No. 1 Reserved

Set to "0".

SW82 No. 2 Reserved
Set to "1".

SW82 No. 3 Reserved
Set to "0".

SW82 No. 4 Reserved
Set to "1".

SW82 No. 5 ~ No. 8 Reserved
Set to "0".

SW83 No. 1 ~ No. 5 Reserved
Set to "0".

SW83 No. 6 Reserved
Set to "1".

SW83 No. 7 Reserved
Set to "0".

SW83 No. 8 Reserved
Set to "1".

SW84 No. 1 ~ No. 4 Reserved
Set to "0".

SW84 No. 5 Reserved
Set to "1".

SW84 No. 6, No. 7 Reserved
Set to "0".

SW84 No. 8 Reserved
Set to "1".

SW85 No. 1 ~ No. 8 Reserved
Set to "0".

SW86 No. 1 ~ No. 3 Reserved
Set to "0".

SW86 No. 4 Reserved
Set to "1".

SW86 No. 5 Reserved
Set to "0".

SW86 No. 6 ~ No. 8 Reserved
Set to "1".

SW87 No. 1 ~ No. 8 Reserved
Set to "0".

SW88 No. 1 ~ No. 8 Reserved
Set to "0".

SW89 No. 1 ~ No. 8 Reserved
Set to "0".

SW90 No. 1 Reserved
Set to "0".

SW90 No. 2 Reserved
Set to "1".

SW90 No. 3 ~ No. 5 Reserved
Set to "0".

SW90 No. 6 Reserved
Set to "1".

SW90 No. 7 Reserved
Set to "0".

SW90 No. 8 Reserved
Set to "1".

SW91 No. 1 ~ No. 8 Reserved
Set to "0".

SW92 No. 1 Reserved
Set to "0".

SW92 No. 2 Reserved
Set to "1".

SW92 No. 3 Waiting time after dialing
The set up of the call time of the auto dial.
90 sec. or depends on each country's specifications.

SW92 No. 4 Show receiver's name
This switch is used to note the receiver's name on the transaction report and activity report. When this switch is set to "0", the receiver's dial number is printed on the report.

SW92 No. 5 ~ No. 8 Reserved
Set to "0".

SW93 No. 1 ~ No. 8 Reserved
Set to "0".

SW94 No. 1 ~ No. 8 Reserved
Set to "0".

SW95 No. 1 ~ No. 4 Reserved
Set to "0".

SW95 No. 5, No. 6 Reserved
Set to "1".

SW95 No. 7 Reserved
Set to "0".

SW95 No. 8 Reserved
Set to "1".

SW96 No. 1 ~ No. 8 Reserved
Set to "0".

SW97 No. 1 ~ No. 8 Reserved
Set to "0".

SW98 No. 1 ~ No. 8 Reserved
Set to "0".

SW99 No. 1 ~ No. 6 Reserved
Set to "0".

SW99 No. 7, No. 8 Reserved
Set to "1".

[3] Troubleshooting

1. Fax troubleshooting

Refer to the following actions to troubleshoot any of the problems mentioned in 1-4.

[1] A communication error occurs.

[2] Image distortion produced.

[3] Unable to do overseas communication.

[4] Communication speed slow due to FALLBACK.

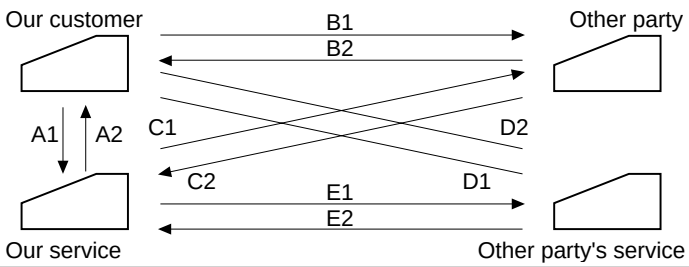
- Increase the transmission level SOFT SWITCH 8-4, 5, 6, 7, 8
  May be used in case [1] [2] [3].
- Decrease the transmission level SOFT SWITCH 8-4, 5, 6, 7, 8
  May be used in case [3].
- Apply line equalization SOFT SWITCH 8-1, 2
  May be used in all cases.
- Slow down the transmission speed SOFT SWITCH 6-5, 6, 7, 8
  May be used in case [2] [3].
- Replace the LIU PWB.
  May be used in all cases.
- Replace the control PWB.
  May be used in all cases.

* If transmission problems still exist on the machine, use the following format and check the related matters.

TO: ATT: Ref.No. :
CC: ATT: Date :
FM: Dept :
Sign :

***** Facsimile communication problem *****			Ref.No.:
From: Mr.	Fax Tel No.:		Date:
Our customer	Name		Tel No.
	Address		Fax No.
	Contact person		Model name
Other party	Name		Tel No.
	Address		Fax No.
	Contact person		Model name
Problem mode	Line: Domestic / international	Mode: G3	Phase: A. B. C. D.
	Reception / Transmission	Automatic reception / Manual reception	
		Automatic dialing / Manual dialing / Others	
Frequency:		%	ROM version:

Confirmation item



Please mark problem with an X
No problem is: 0

A1	A2	B1	B2	C1	C2	D1	D2	E1	E2

Transmission level setting is ( ) dB at our customer

Transmission level ( ) dBm
Reception level ( ) dBm
By level meter at B1 and B2

Comment

Countermeasure

**** Please attach the G3 data and activity report on problem. ****

[4] Error code table

1. Communication error code table

G3 Transmission

Code	Final received signal	Error Condition (Receiver side)
0	Incomplete signal frame	Cannot recognize bit stream after flag
1	NSF, DIS	Cannot recognize DCS signal by echo etc. Cannot recognize NSS signal (FIF code etc)
2	CFR	Disconnects line during reception (carrier missing etc)
3	FTT	Disconnects line by fallback
4	MCF	Disconnects line during reception of multi page Cannot recognize NSS, DCS signal in the case of mode change
5	PIP or PIN	The line is hung up without replying to telephone request from the receiving party.
6	RTN or RTP	Cannot recognize NSS, DCS signal after transmit RTN or RTP signal.
7	No signal or DCN	No response on receiver side or DCN signal received* (transmitter side)
8	–	Owing to error in some page the error could not be corrected although the specified number of error retransmission was attempted.
11	–	Error occurred after or while reception by the remote (receiving) machine was revealed to be impossible.
12	–	Error occurred just after fallback.
13	–	Error occurred after a response to retransmission end command was received.

G3 Reception

Code	Final received signal	Error Condition (Receiver side)
0	Incomplete signal frame	Cannot recognize bit stream after flag
1	NSS, DCS	Cannot recognize CFR or FTT signal Disconnects line during transmission (line error)
2	NSC, DTC	Cannot recognize NSS signal (FIF code etc)
3	EOP	Cannot recognize MCF, PIP, PIN, RTN, RTP signal
4	EOM	Cannot recognize MCF, PIP, PIN, RTN, RTP signal in the case of mode change
5	MPS	The line is hung up without replying to communication request.
6	PR1-Q	Cannot recognize PIP, PIN signal in the case of TALK request
7	No signal or DCN	No response in transmitter (cannot recognize DIS signal) or DCN signal received* (receiver side)
8	–	Error occurred upon completion of reception of all pages.
9	–	Error occurred when mode was changed or Transmission/Reception switching was performed.
10	–	Error occurred during partial page or physical page reception.
11	–	Error occurred after or during inquiry from the remote (transmitting) machine as to whether reception is possible or not.
12	–	Error occurred during or just after fallback.
13	–	Error occurred after the retransmission end command was received.
14	–	Error occurred after the voice communication command was received.

Super G3 mode

Error Code	Transmission Errors	Reception Errors
E-16	Same as E-0	Same as E-0
E-17	Same as E-1	Same as E-1
E-18	Same as E-2	Same as E-2
E-19	–	Same as E-8
E-20	Same as E-4	Same as E-9
E-21	–	Same as E-10
E-22	–	–
E-23	Same as E-7	Same as E-7
E-24	Same as E-8	–
E-25	Same as E-11	Same as E-11
E-26	Same as E-12	Same as E-12
E-27	Same as E-13	Same as E-13
E-28	–	Same as E-14
E-29	Error occured during handshaking for super G3 mode	
E-30		
E-31		

<Reference> Details of E-29 ~ 31

E-29	Handshaking error in V.8 negotiation procedure
E-30	Handshaking error in V.34 line probing procedure
E-31	Handshaking error in V.34 HDX training procedure

2. Service call error massage

Message	Description
REMOVE ORIGINAL (S)	Document is stuck at the auto-feeder.
NO PAPER (TRAY)	No recording paper on the tray.
NO PAPER (UPPER)	No recording paper in the upper cassette.
NO PAPER (LOWER)	No recording paper in the lower cassette.
NO PAPER (BOTH CASS.)	No recording paper in either cassette.
NO PAPER (TRAY, UPPER)	No recording paper in the tray nor in the upper cassette.
NO PAPER (TRAY, LOWER)	No recording paper in the tray nor in the lower cassette.
NO PAPER	No recording paper anywhere.
SIZE ERROR	The size of the recording paper is wrong.
LASER ERROR	The laser unit abnormal.
POLYGON ERROR	The polygon motor abnormal.
FAN MOTOR ERROR	The fan motor abnormal.
CHECK UPPER CASSETTE	The upper cassette is not set properly.
CHECK LOWER CASSETTE	The lower cassette is not set properly.
CHECK BOTH CASSETTES	Neither cassette is set properly.
TONER EMPTY	There is no toner left.
PCU COMM. ERROR	No data communication between the PCU and the control PWB.
RX DOCUMENT TRAY OFF	The document-receiving tray is not set properly.
HIGH VOLTAGE ERROR	Abnormality with the high-voltage portion.
HEATER LOW ERROR	Heater temperature is too low.
HEATER HIGH ERROR	Heater temperature is too high.
WARMING UP ERROR	Warming up is not done properly.
CHECK COVER OR DRUM	Printer cover may be open, or the drum cartridge may not be set properly.
DRUM LIFE OVER	Drum life is over.
PAPER JAM	Recording paper is stuck inside.
SUB1 BOARD ERROR!!	The line 1 PWB may not be connected properly, or the line 2 PWB may be misconnected to the line 1 PWB connector.
SUB2 BOARD ERROR!!	The line 1 PWB is misconnected to the line 2 PWB connector.
SUB1/2 BOARD ERROR!!	Neither of line 1 PWB nor 2 PWB is connected properly.
MEMORY BOARD ERROR!!	Memory PWB is not installed or is damaged.

[5] Overseas communication mode

(1) Function

The Super G3 (V.34) mode is susceptible to influence of line. It is better to use the G3 (V.17) mode for communication in specific line conditions.

This function is provided to support this status.

(2) Memory retransmission

In case of memory transmission the retransmission is performed in the following conditions.

No.	Conditions	Operation
1	When a communication error occurred in communication in the Super G3 mode due to page 1 MCF reception failure.	The retransmission of this communication is performed after setting Super G3 to OFF (in V.17 mode).
2	When a communication error occurred in communication in the Super G3 mode after reception of page 1 MCF.	The retransmission of this communication is performed without setting Super G3 to OFF (in V.34 mode).
3	When a communication error occurred in retransmission.	Retransmission is performed again according to 1 and 2 above.
4	When a communication error occurred in sequential system communication.	Retransmission is performed according to 1 and 2 above for each station.

(3) Original transmission

Since retransmission is not provided for the original transmission, recovery by the method 1 is impossible. Accordingly, for the original transmission set Super G3 to OFF, and apply V.17 mode.

(4) Super G3 function setting to OFF by operator

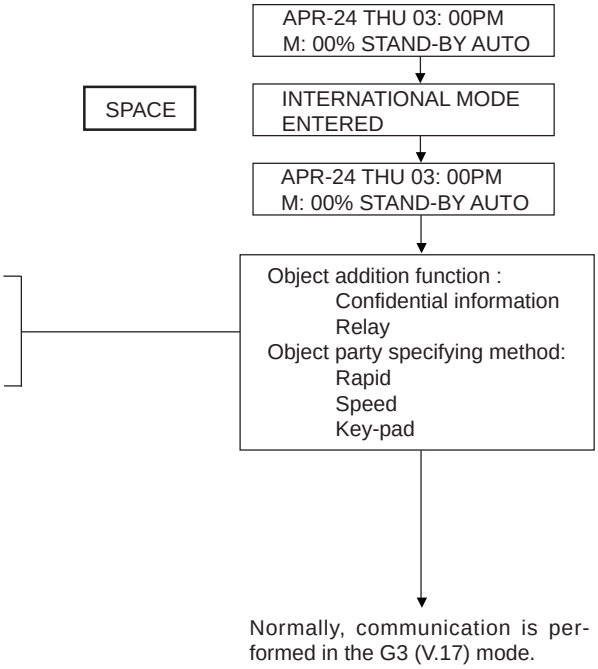
A function to set Super G3 function to OFF is provided for operator in addition to the functions described in items (2) and (3) above. However, this function is invalid in the default mode.

It is made valid only when requested by using the soft switch.

SW75 No.4 = 0: Operation invalid (Default) 1: Operation valid

(4)-1 Setting method

① Before communication operation press the SPACE key to set the communication to OFF in the Super G3 mode.



② Perform the transmission/polling operation.

The operations which are taken as objects are the following.

* Instantaneous single station auto-dial transmission (original/memory)
* Time-specified single station transmission
* Program instantaneous single station transmission
* Program time-specified single station transmission
* Time-specified single station polling
* Program instantaneous single station polling
* Program time-specified single station polling
* Manual transmission (original/memory)
* Batch transmission

(4)-2 Canceling method (this setting is not canceled while one of the following operations is not performed)

① After setting operation (pressing the SPACE key) press the STOP key on the WAIT screen.

② After setting operation (pressing the SPACE key) hold for one minute.

In case of operation ① and ② the display shown right will appear for 2 seconds.

③ Perform the communication operation (all the communication operations).

④ Start up again the machine (turn on power).

(4)-3 Others

① The operation to set Super G3 to OFF is valid only for one communication which is performed successively.

[6] Administrator mode in the personal book function

In the personal book function, 30 books from 01 to 30 may be set. It is also possible to set the administrator as a special book.

(a) Setting : Same as the normal personal book, except for the book number to be specified as "00".

(b) Switching to the administrator mode : Press the "PERSONAL BOOK" key and enter the "passcode of the book00" in the stand-by mode.

(c) Cancellation of the administrator mode : Press the "STOP" key and enter "1" in the stand-by mode.

(d) Function in the administrator mode : When the following list is output, the information of all books is read out.

1) TELEPHONE NUMBER LIST
2) RELAY GROUP LIST
3) PROGRAM/GROUP LIST
4) TIMER LIST
5) MEMORY STATUS REPORT

"PERSONAL BOOK LIST" may be output in item 16 of the "FUNCTION + 2 : LISTMODE".

CHAPTER 3. MECHANICAL DESCRIPTION

[3] Disassembly and assembly procedures

- This chapter mainly describes the disassembly procedures. For the assembly procedures, reverse the disassembly procedures.
- Easy and simple disassembly/assembly procedures of some parts and units are omitted. For disassembly and assembly of such parts and units, refer to the Parts List.
- The numbers in the illustration, the parts list and the flowchart in a same section are common to each other.
- To assure reliability of the product, the disassembly and the assembly procedures should be performed carefully and deliberately.

1	**Rear cabinet**

Parts list (Fig. 1)

No.	Part name	Q'ty
1	Main unit	1
2	Screw (3×10)	4
3	Rear cabinet	1

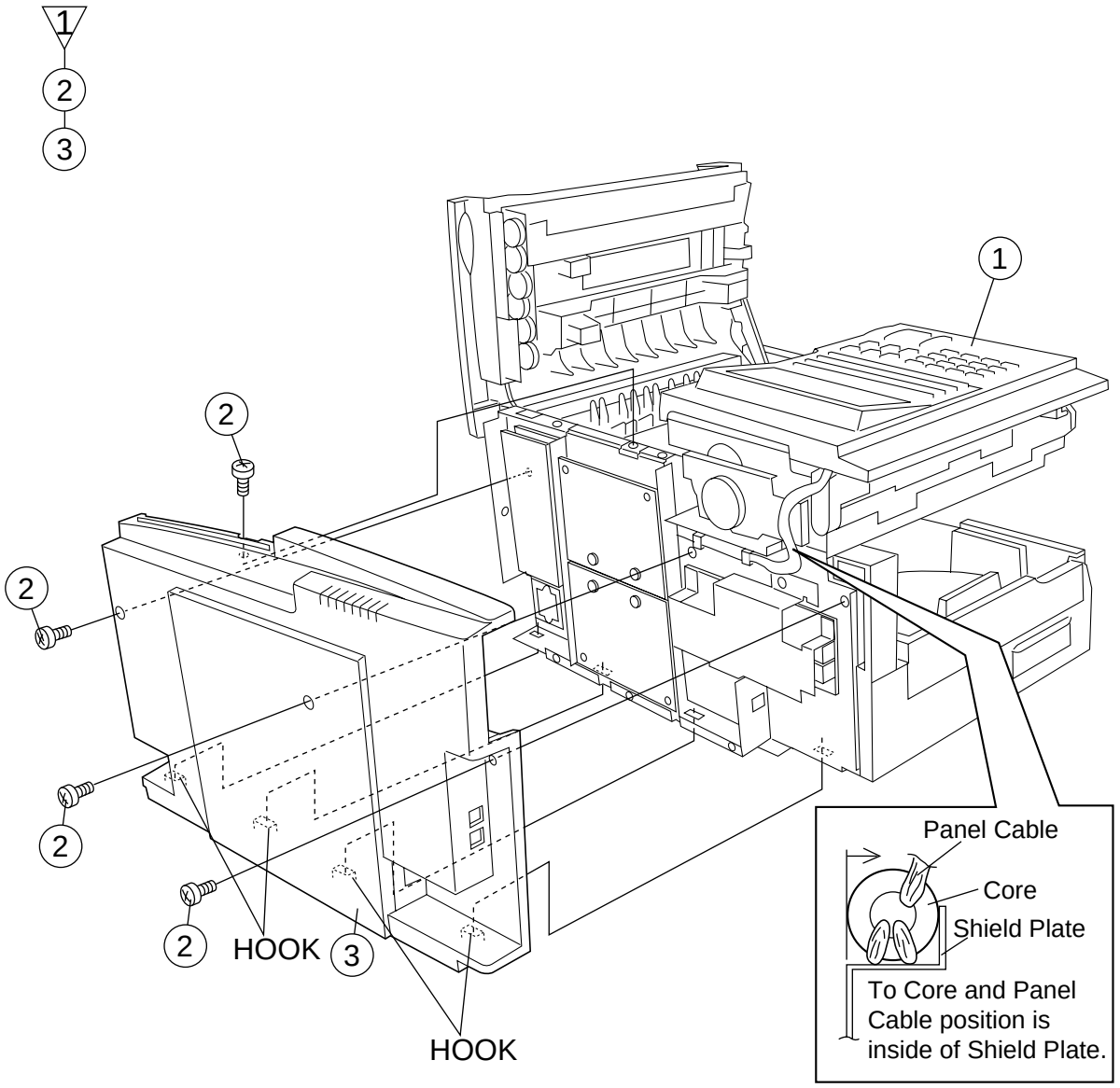


Fig. 1

2 Line control PWB unit, Sub PWB plate, Right cabinet

Parts list (Fig. 2)

No.	Part name	Q'ty
1	Main unit	1
2	Screw (3×18)	2
3	PWB bush	2
4	Line-1 control PWB unit	1
5	PWB collar	2
6	PWB spacer	2
7	Screw (3×18) (OPTION:FO-67DL)	2
8	PWB bush (OPTION:FO-67DL)	2
9	Line-2 control PWB unit (OPTION:FO-67DL)	1
10	PWB collar (OPTION:FO-67DL)	2
11	PWB spacer (OPTION:FO-67DL)	2
12	Screw (3×6)	7
13	Sub PWB plate	1
14	Screw (3×10)	2
15	Right cabinet	1

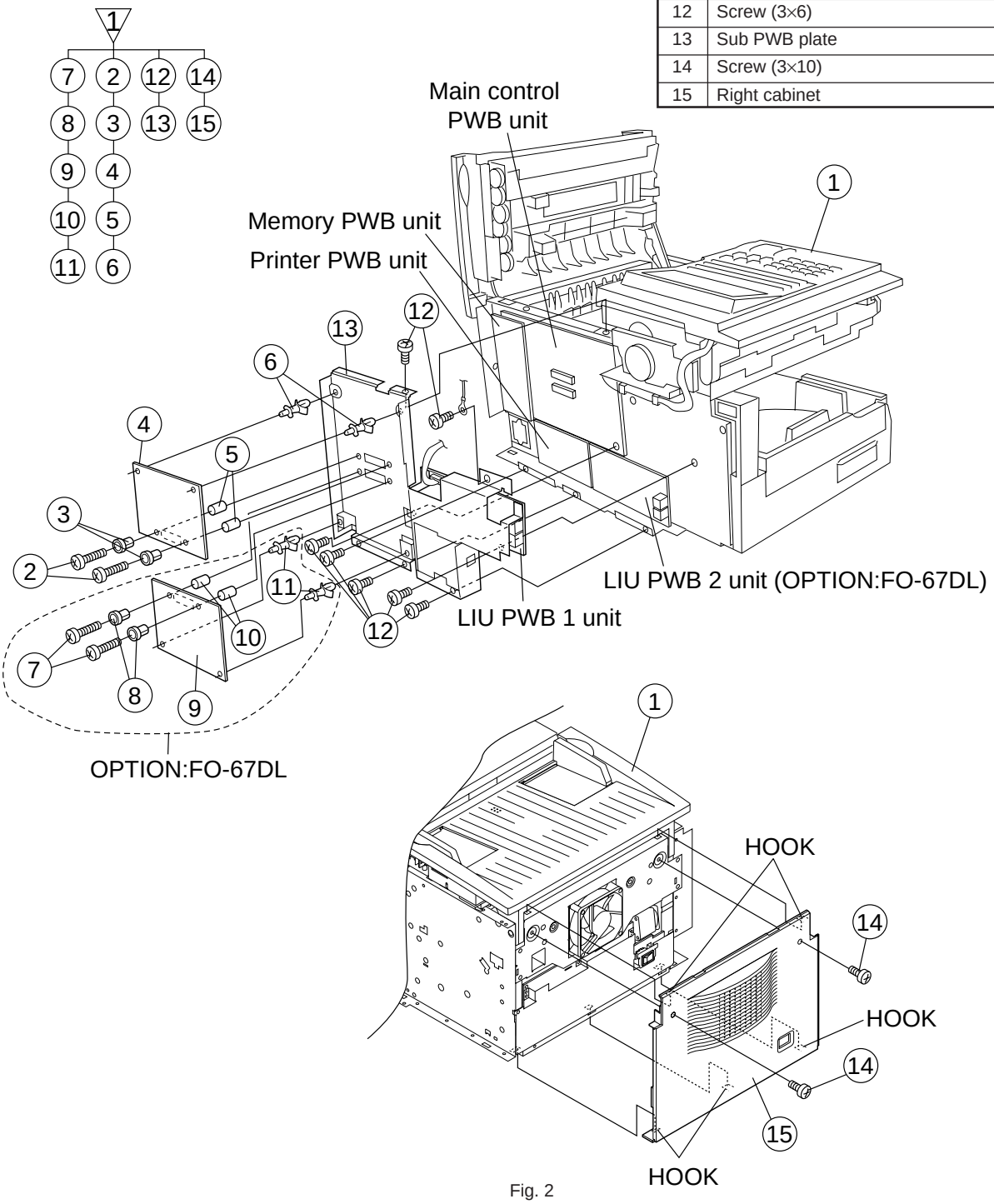


Fig. 2

3	Memory PWB unit, LIU PWB 2 unit (OPTION:FO-67DL), Printer PWB unit, Main control PWB unit

Parts list (Fig. 3)

No.	Part name	Q'ty
1	Main unit	1
2	Screw (3×25)	2
3	Memory PWB unit	1
4	PWB support	2
5	Spacer	2
6	Screw (3×6)	4
7	Screw (3×6) (OPTION:FO-67DL)	2
8	LIU PWB 2 unit (OPTION:FO-67DL)	1
9	Printer PWB unit	1
10	Main control PWB unit	1
11	PWB cushion	1
12	Sheet A	1

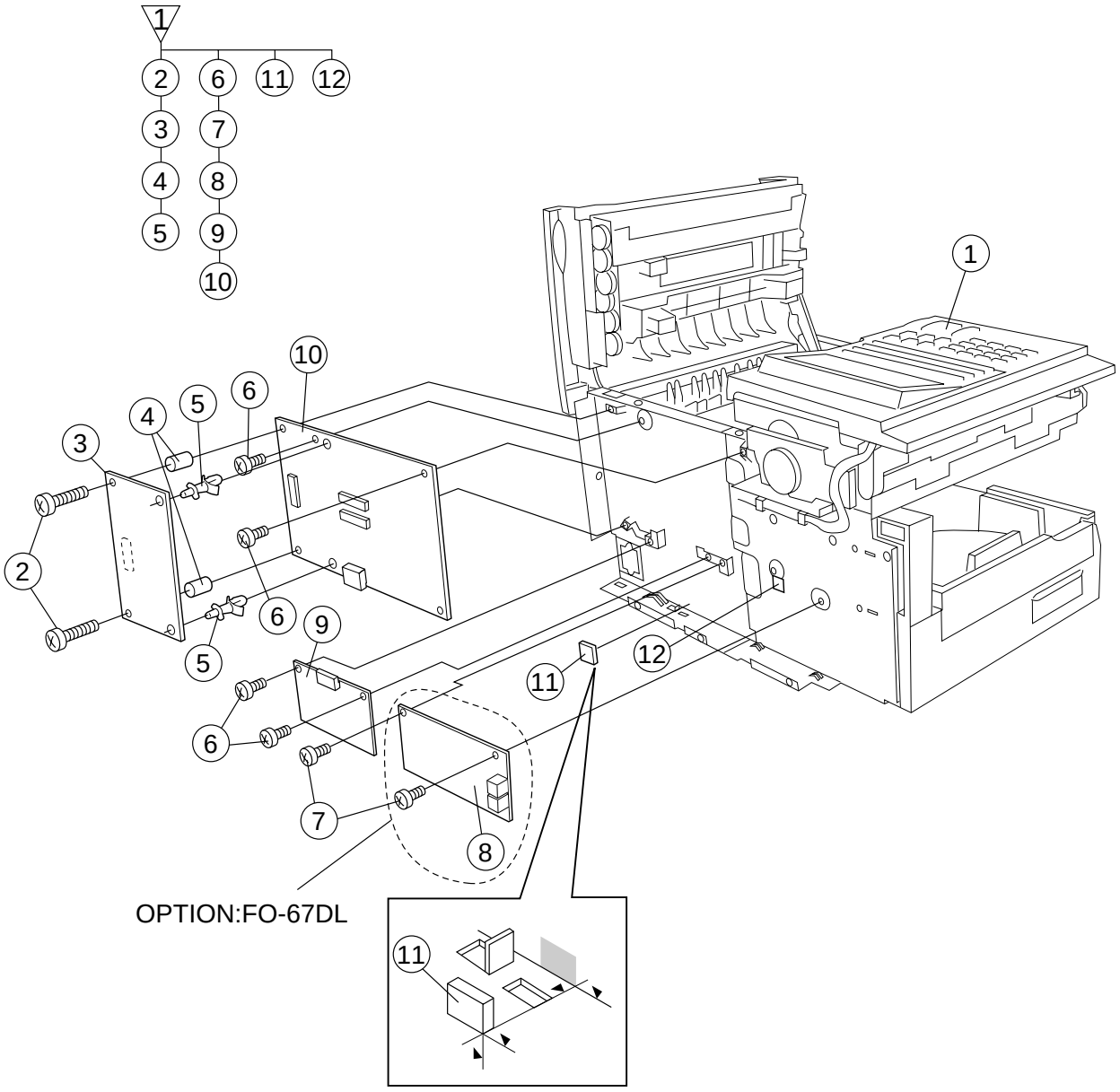
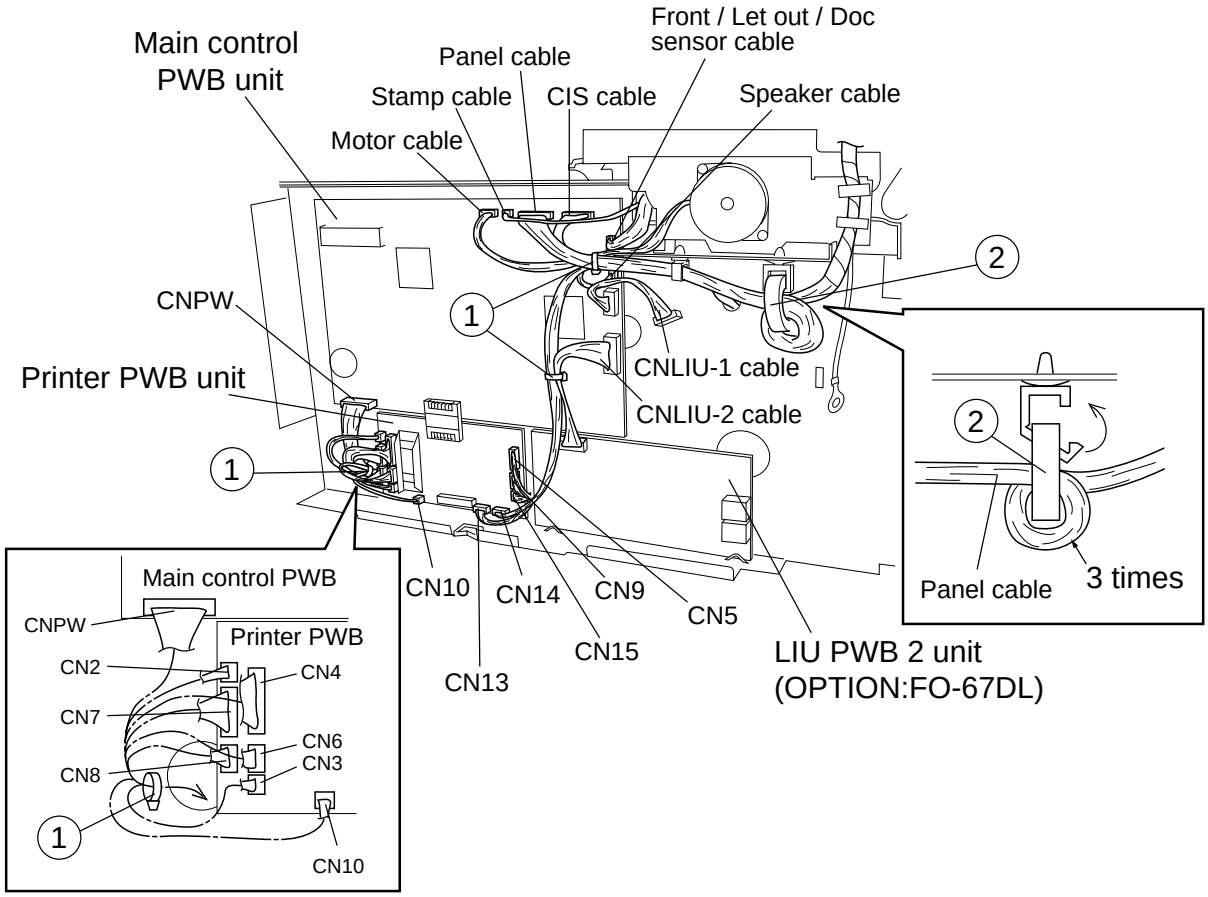


Fig. 3

14	**Wire treatment**

Parts list (Fig. 4)

No.	Part name	Q'ty
1	Band	3
2	Core	2



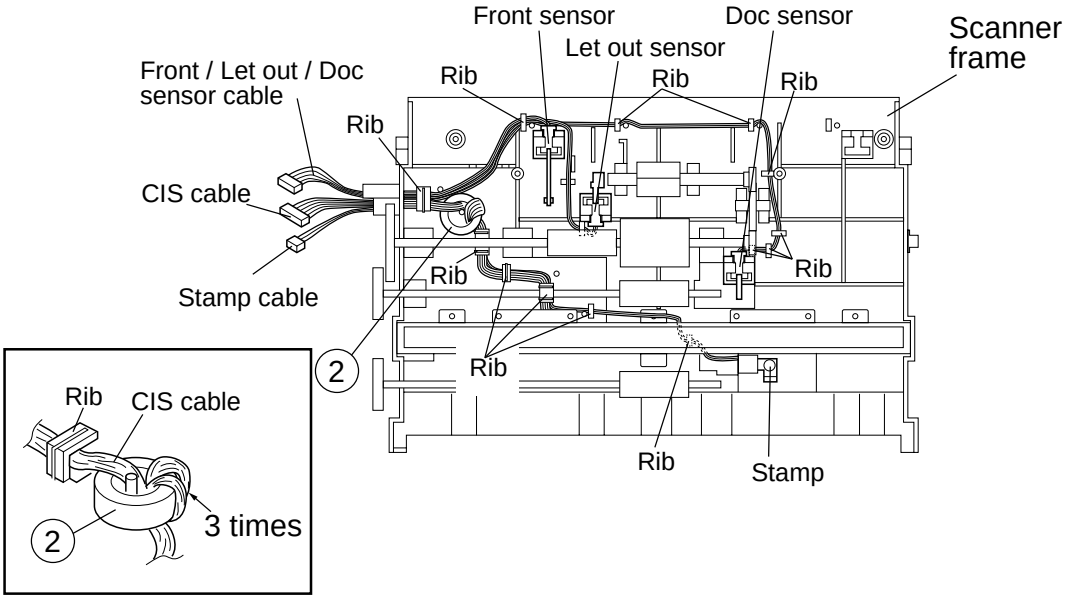
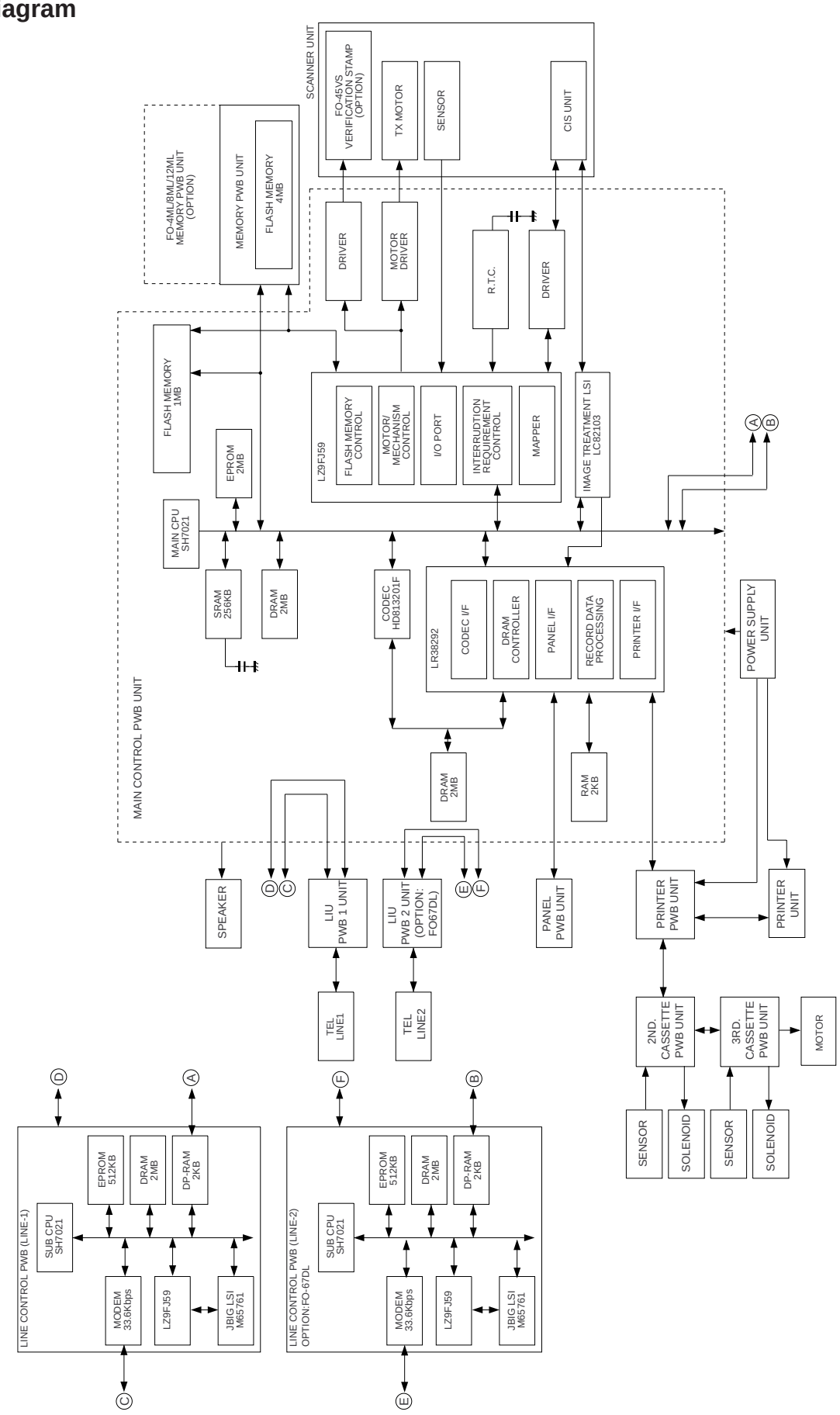


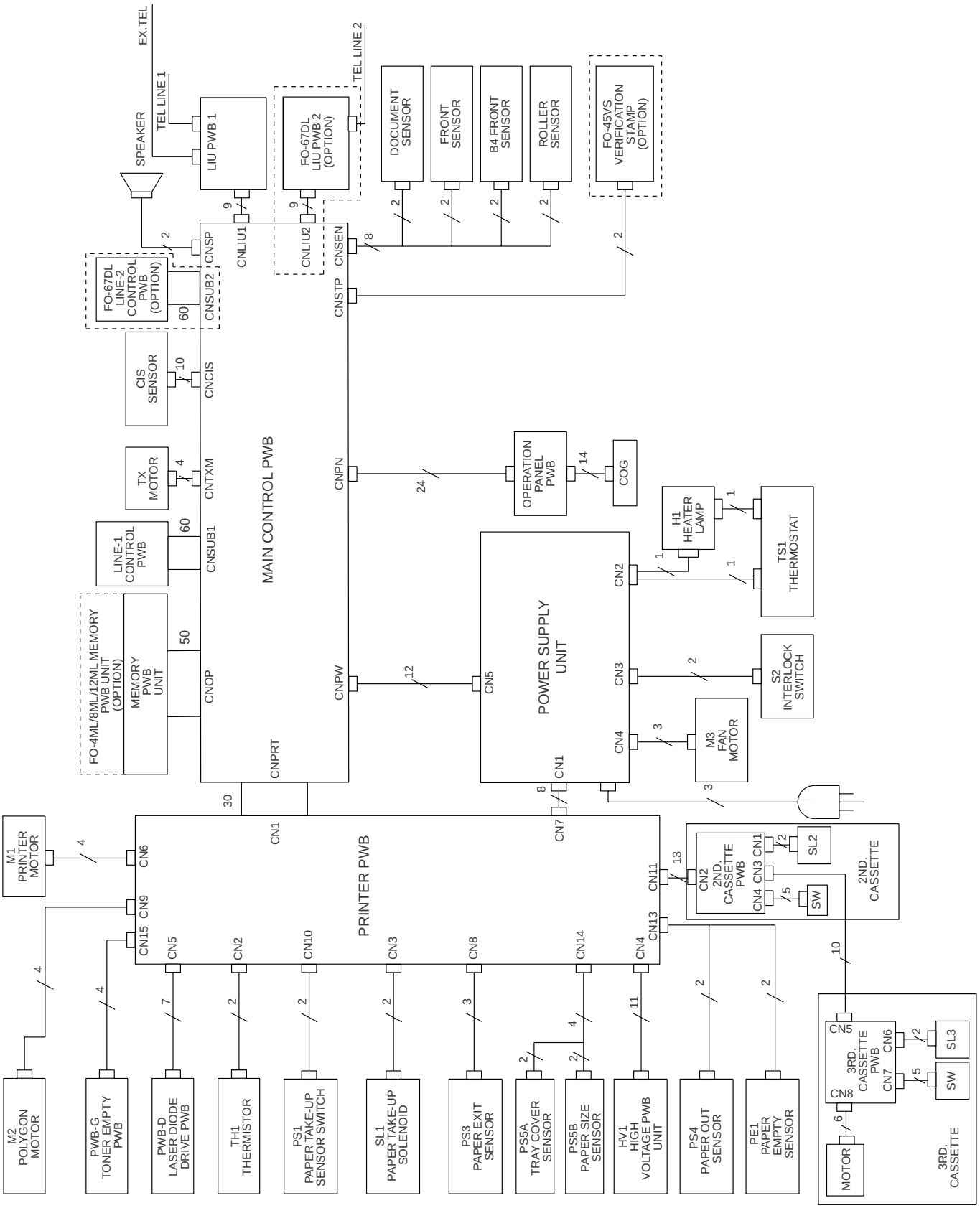
Fig. 4

CHAPTER 4. DIAGRAMS

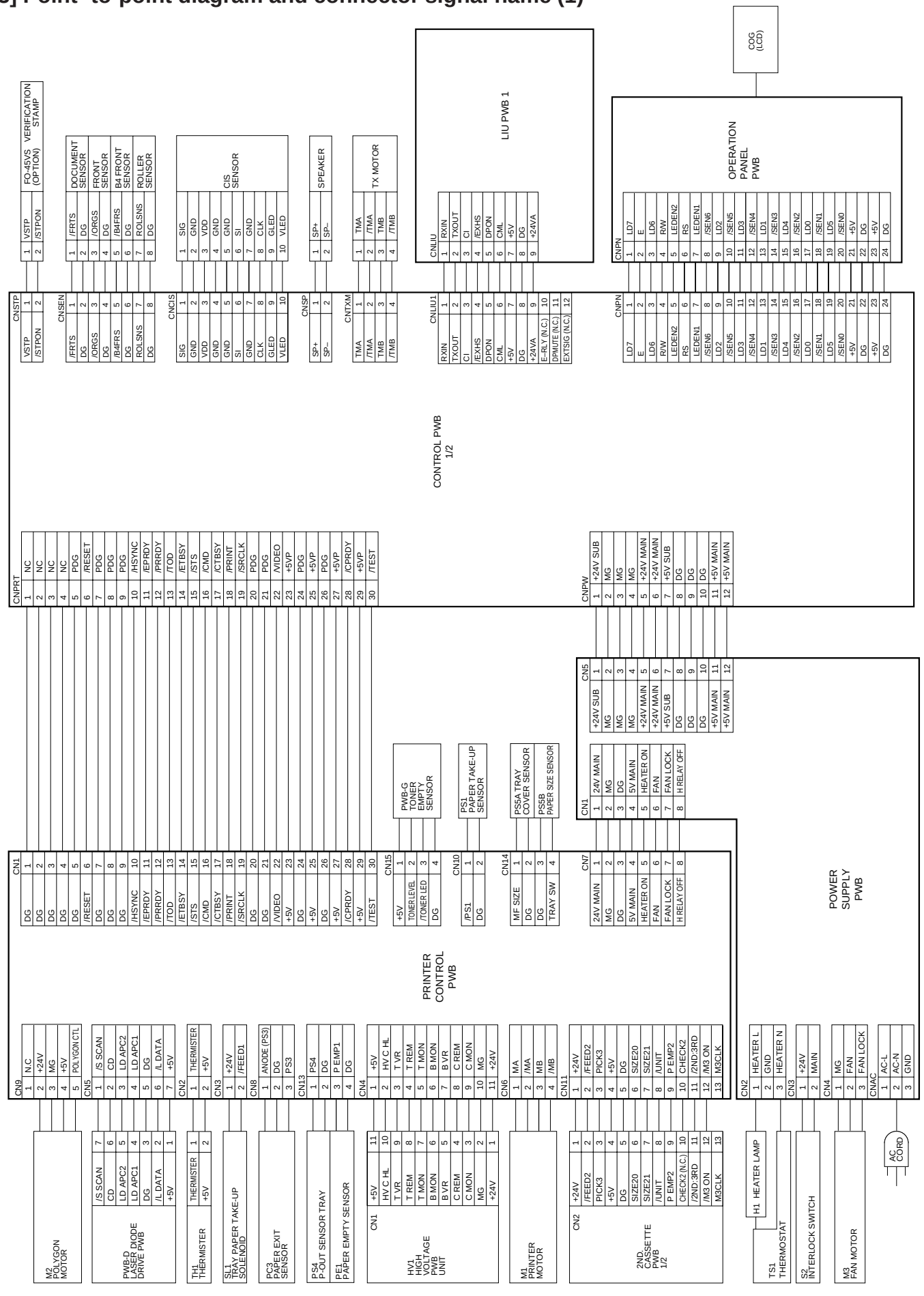
[1] Block diagram



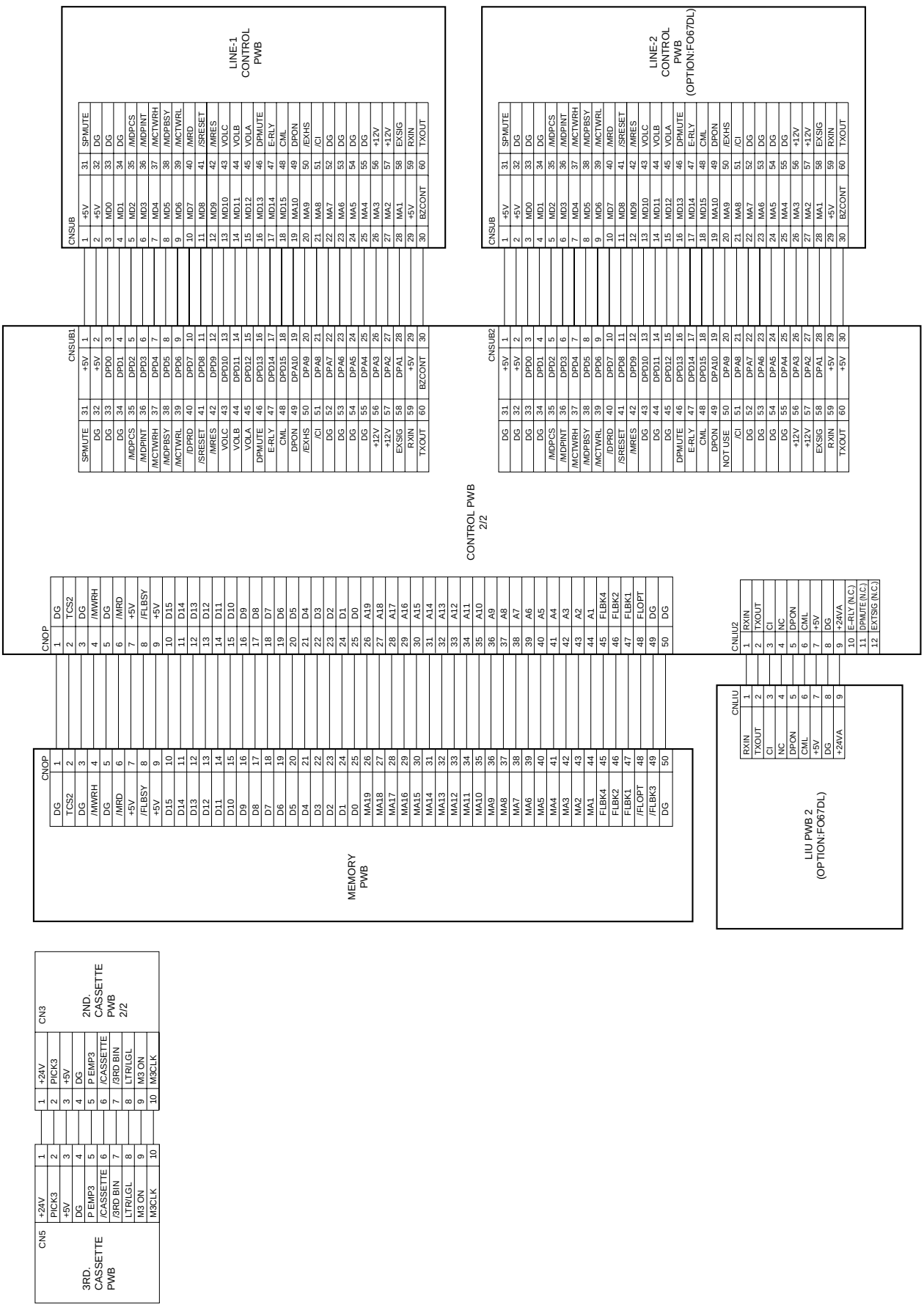
[2] Wiring diagram



[3] Point- to-point diagram and connector signal name (1)



Point- to-point diagram and connector signal name (2)



CHAPTER 5. CIRCUIT DESCRIPTION

[1] Circuit description

1. General description

In this machine, the facsimile control block except the printer control is mainly composed of the units shown in Fig. 1.

2. PWB configuration

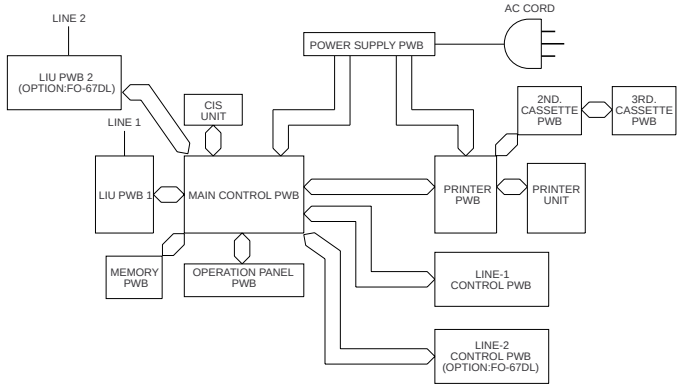


Fig. 1

1) Main Control PWB

The Main Control PWB controls all the other operations except the printing operation of the printer and line control.

2) Line Control PWB

The Line-1 Control PWB controls TX/RX of 1st line and the speaker volume. The Line- 2 Control PWB controls TX/RX of 2nd line, when FO-67DL (OPTION) is installed.

3) LIU PWB 1, LIU PWB 2 (OPTION:FO-67DL)

The LIU PWB controls the I/F telephone function of the circuit with the control signals from the Line Control PWB.

4) CIS UNIT

CIS UNIT converts the image of the sending or copying draft into the photoelectric signals and transmits the signals to the Main Control PWB.

5) Operation Panel PWB

The Operation Panel PWB detects the key input, turns on and off LED and displays LCD according to the control signals from the Main Control PWB.

6) Power Supply PWB

DC voltages (+5V, +24V) are produced from AC120V, and are supplied to the Printer Unit and Main Control PWB Unit.

7) Memory PWB

The 4MByte image memory composed by flash memory which can be supported. When FO-4ML/8ML/12ML (OPTION) installed, a capacity rise is possible to 8MB/12MB/16MB.

8) 2nd. Cassette PWB

The paper feeding control is relayed from the 2nd. cassette.

9) 3rd. Cassette PWB

The paper feeding control from the 3rd. cassette is relayed and the feeding motor is driven.

[2] Circuit description of Main Control PWB

1. General description

The Main Control PWB is composed of the following blocks.

① Main Control Block
② Image Memory Block
③ Back-up Circuit Block
④ Image Signal Process Block
⑤ Speaker Amplifier Block
⑥ Reading Process and Mechanical Control Block
⑦ Gate Array (A) Block
⑧ Gate Array (B) Block
⑨ CODEC Block
⑩ Page Memory Block
⑪ Drive Block
⑫ DPRAM I/F Block

2. Description of each block

(1) Main Control Block

The Main Control Block uses RISC microprocessor HD6437021 as CPU, being composed of ROM (2 MByte) and DRAM (2 MByte).

1) HD6437021 (IC12): pin-100, QFP (main CPU)

The device is a microprocessor which integrates the peripheral functions, using CPU of 32-bit RISC type as the core. In the instrument, the following peripheral functions are mainly used.

① ROM of 32 KByte and RAM of 1 KByte are integrated.
A part of programs are stored in the integrated ROM.
② DMA Controller (4 channels are provided, and 2 channels alone are used.)
ch.0: Used to transmit image data between CODEC (HD813201F) and DRAM (IC13).
ch.2: Used to transmit image data between Flash memory on the Memory PWB and DRAM(IC13).
③ Clock-synchronous type serial communication interface commands and statuses are communicated with PCU.
④ Interruption
$\overline{IRQ2}$: Interruption request from Line-1 Control PWB.
$\overline{IRQ3}$: Interruption request from Line-2 Control PWB.(OPTION:FO-67DL)
$\overline{IRQ4}$, $\overline{IRQ7}$: Interruption request from Gate Array (A) (LZ9FJ59)
$\overline{IRQ6}$: Interruption request from Gate Array (B) (LR38292)
$\overline{IRQ0}$, $\overline{IRQ1}$, $\overline{IRQ5}$: Not used.
$\overline{NMI}$: Not used.
⑤ DRAM Controller
Addressing to DRAM(IC13) of the system and control and refresh control of $\overline{RAS}$ and $\overline{CAS}$ signals are executed.
⑥ Timer and Watch Dog Timer
⑦ General-purpose I/O Port
Control of LIU and control of analog process of read signals are executed.
⑧ Clock Oscillation
Crystal oscillator of 19.66 MHz is connected for operation of 19.66 MHz.
⑨ Generation of Alarm Sound and Ringer Sound
The keys on the operation panel are pressed to respectively generate the key input sound, alarm sound and ringer sound.

2) 27C160 (IC2): pin-42, DIP (EPROM)

Programs are stored in a 16 Mbit ROM.

3) HY5118164 or MSM5118165 (IC13, IC23): pin-42, SOJ (DRAM)

Used as the system memory of Main CPU and transmission buffer of communication.

HD6437021 (IC12) Terminal descriptions

Classification	Code	Terminal No. (TFP-100B)	I/O	Name	Function
Power	Vcc	13, 38, 63, 73, 80, 88	I	Power	Connect to the power supply. Connect Vcc terminals to the power units of all systems. If any open terminal is present, it will not operate
	Vss	4,15,24,32, 41,50,59,70, 81,82, 92	I	Ground	Connect to the ground. Connect Vcc terminals to the power units of all systems. If any open terminal is present, it will not operate.
Clock	EXTAL	71	I	External clock	Connect to the quartz oscillator. Moreover, EXTAL terminal can input the external clock. Use the same frequency for the quartz oscillator, external clock and system clock.
	XTAL	72	I	Crystal	Connect the quartz oscillator. Connect the same frequency of the system clock (CK). To input external clock from EXTAL terminal, open EXTAL terminal.
	CK	69	O	System clock	Supply system clock to the peripheral device.
System control	$\overline{\text{RES}}$	76	I	Reset	If this terminal is turned to the low level when NMI is at the high level, it will be brought into the power-on state. If this terminal is turned to the low level when NMI is at the low level, it will be brought into the manual reset state.
	$\overline{\text{WDTOVF}}$	75	O	Watch dog timer overflow	It is overflow output signal from WDT.
	$\overline{\text{BREQ}}$	60	I	Bus right request	Select the low level to make the external device request the release of bus right.
	$\overline{\text{BACK}}$	58	O	Bus right request acknowledge	It indicates that the bus right is released to the external device. When receiving $\overline{\text{BACK}}$ signal, the device which outputs $\overline{\text{BREQ}}$ signal can know that bus right is obtained.
Operation mode control	MD2~ MD0	79~77	I	Mode setting	The terminal determines the operation mode. During operation, don't vary any input value. The relationship between MD2 thru MD0 and operation modes are shown in the following list.
Interrupt	NMI	74	I	No-maskable interrupt	This is the interrupt request terminal which can not be masked. Either leading edge or trailing edge is selected for receiving.
	$\overline{\text{IRQ0}}$~ $\overline{\text{IRQ7}}$	65,66,67,68, 97,98,99,100	I	Interrupt request 0 thru 7	This is the interrupt request terminal which can be masked. Either level input or edge input can be selected.
	$\overline{\text{IRQOUT}}$	61	O	Interrupt request output in the slave mode	It indicates that a factor of interrupt occurs. It indicates that interrupt occurs in the bus release mode.
Address	A21~A0	45~42,40,39, 37~33,31~25, 23~20	O	Address	Address is output.
Data bus	AD15~ AD0	19~16,14, 12~5,3~1	I/O	Data bus	Bidirectional data bus of 16 bits Multiplex is possible with the low-order 16 bits of the address.
	DPH	64	I/O	High-order side data bus parity	Parity data corresponds to D15 thru D8.
	DPL	62	I/O	Low-order side data bus parity	Parity data corresponds to D7 thru D0.

(Continuing)

Relationship between MD2 thru MD0 and operation modes

MD2	MD1	MD0	Operation mode	Integrated ROM	Bus width of area 0
0	0	0	MCU mode	Invalid	8-bit size
0	0	1			16-bit size
0	1	0		Valid	—
0	1	1	(Reserved)	—	—
1	0	0	(Reserved)	—	—
1	0	1	(Reserved)	—	—
1	1	0	(Reserved)	—	—
1	1	1	(Reserved)	—	—

HD6437021 (IC12) Terminal descriptions

Classification	Code	Terminal No. (TFP-100B)	I/O	Name	Function
Bus control	$\overline{WAIT}$	54	I	Wait	It is input to insert Tw into the bus cycle during access to the external space.
	$\overline{RAS}$	52	O	Low address strobe	Timing signal of low address strobe of DRAM
	$\overline{CASH}$	47	O	High-order column address strobe	Timing signal of column address strobe of DRAM It is output for access to high-order 8 bits of data.
	$\overline{CASL}$	49	O	Low-order column address strobe	Timing signal of column address strobe of DRAM It is output for access to low-order 8 bits of data.
	$\overline{RD}$	57	O	Read	It indicates that outside is read out.
	$\overline{WRH}$	56	O	High-order write	It indicates writing at the external high-order 8 bits.
	$\overline{WRL}$	55	O	Low-order write	It indicates writing at the external low-order 8 bits.
	$\overline{CS0}$~$\overline{CS7}$	46~49, 51~54	O	Chip select 0 thru 7	Chip select signal for external memory or device
	$\overline{AH}$	61	O	Address hold	Address hold timing signal for device which uses multiplex bus of address/data
	$\overline{HBS}$, $\overline{LBS}$	20 56	O	Low-/high-order byte strobe	Strobe signal of high/low byte (Commonly used with AO, $\overline{WRH}$.)
	$\overline{WR}$	55	O	Write	Output during writing. (Commonly used with $\overline{WRL}$.)
DMAC	$\overline{DREQ0}$, $\overline{DREQ1}$	66,68	I	DMA transfer request (Channels 0 and 1)	Input terminal of DMA transfer request from external
	DACK0, DACK1	65,67	O	DMA transfer request receiving (Channels 0 and 1)	It indicates that DMA transfer request is received.
16-bit integrated timer pulse unit (ITU)	TIOCA0, TIOCB0	51, 53	I/O	ITU input capture/output conveyor (Channel 0)	Output terminal of input capture input/output conveyor
	TIOCA1, TIOCB1	62, 64	I/O	ITU input capture/output conveyor (Channel 1)	Output terminal of input capture input/output conveyor
	TIOCA2, TIOCB2	83, 84	I/O	ITU input capture/output conveyor (Channel 2)	Output terminal of input capture input/output conveyor
	TIOCA3, TIOCB3	85, 86	I/O	ITU input capture/output conveyor (Channel 3)	Output terminal of input capture input/output conveyor
	TIOCA4, TIOCB4	87, 89	I/O	ITU input capture/output conveyor (Channel 4)	Output terminal of input capture input/output conveyor
	TOCXA4, TOCXB4	90, 91	O	ITU output conveyor (Channel 4)	Output terminal of output conveyor
	TCLKA~ TCLKD	65,66,90, 91	I	ITU timer clock input	External clock input terminal to counter of ITU
Timing pattern controller (TPC)	TP15~ TP0	100~93, 91~89, 87~83	O	Timing pattern Output 15 thru 0	Output terminal of timing pattern
Serial communication interface (SCI)	TxD0, TxD1	94, 96	O	Sending data (Channels 0 and 1	Sending data output terminal of SCI0, 1
	RxD0, RxD1	93, 95	I	Receiving data (Channels 0 and 1)	Receiving data input terminal of SCI0, 1
	SCK0, SCK1	97, 98	I/O	Serial clock (Channels 0 and 1)	Clock input/output terminal of SCI0, 1
I/O port	PA15~ PA0	68~64, 62~60, 58~51	I/O	Port A	Input/output terminal of 16 bits Input/output can be assigned for each bit.
	PB15~ PB0	100~93, 91~89, 87~83	I/O	Port B	Input/output terminal of 16 bits Input/output can be assigned for each bit.

(2) Image Memory Block

This block is composed of Memory PWB circuit.
Refer to [4] Circuit description of Memory PWB for the details.

(3) Back-up Circuit Block

This block is composed of SRAM (256KByte), Flash Memory (1MB) and RTC (SM8578BV).

1) BS62LV1024SC-70 (IC15, IC21) ... pin32, SOP

This device is a 1Mbit SRAM.
The setting of receiving mode, optional setting content, soft switch content and dairy data are stored. Even if the power supply of the main body is turned off, it is backed up with a lithium battery.

2) LH28F800SUT-70 (IC10) ... pin56, TSOP

This device is a 16Mbit flash memory of a nonvolatile type whose content does not volatilize even if power is turned off.
And it is stored the several initial data, as the telephone list etc.

3) SM8578BV (IC1): pin-8, SOP (Real Time Clock IC)

It is oscillated with the quartz oscillator of 32.768KHz, and the clock and calendar functions are provided. Even if the power supply of the main body is turned off, it is backed up with lithium battery. This device executes the clock-synchronous type serial communication with the Gate Array (A), and CPU can know the time and date through the Gate Array (A).

(4) Image Signal Process Block

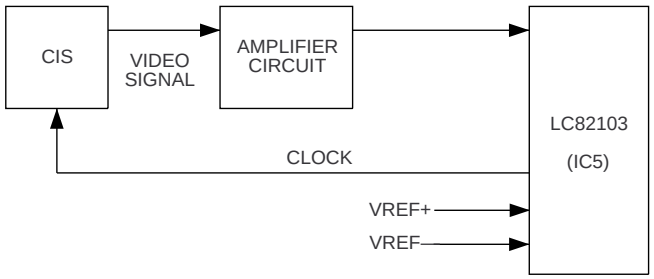


Fig. 2

The CIS is driven by the LSI (LC82103), and the output video signal from the CIS is input into the LC82103 through the amplifying circuit. The ADC and buffer are provided in the LC82103, and the digital image processing is performed.

(5) Speaker Amplifier Block

The speaker amplifier monitors the line under the on-hook mode, outputs the buzzer sound generated from the SH7021, ringer sound, DTMF generated from the Line Control PWB, and line sound.

(6) Reading Process and Mechanical Control Block

1) Mechanical Control Block

The Mechanical Control Block is mainly composed of the Gate Array (A) (IC8: LZ9FJ59) to control the following.

(a) Sending Motor Control

The revolution speed and timing of the Sending Motor are controlled to output the control signals to the Motor Driver (IC7).

(b) End Stamp (OPTION:FO-45VS) and LED Lamp Control

On/off of the End Stamp and LED Lamp is controlled with the software.

(7) Gate Array (A) Block

This block is mainly composed of the Gate Array (A) (IC8: LZ9FJ59), and has the following functions.

① Mapper
Mapping is executed in the memory area of the memories, Gate Array (B), Modem, CODEC and Reading Process LSI (LC82103).

② Mechanical Control Block
Refer to 1) Mechanical Control Block of 2-(6) Reading Process and Mechanical Control Block.

③ IC Interface for clock
Writing and reading to IC (IC1: SM8578BV) for clock is executed in the clock-synchronous type serial transfer mode.

LC82103 (IC5)

Type					
I	INPUT	B	BIDIRECTION	NC	NOT CONNECT
O	OUTPUT	P	POWER		

PIN	I/O	Name	Function	PIN	I/O	Name	Function
1	B	D7	CPU interface data bus pin D7 is the MSB pin, and D0 is the LSB pin.	43	P	AVDD	Analog system power supply pin.
2	B	D6		44	I	DALRH	D/A converter high reference voltage pin for A/D converter low reference voltage.
3	B	D5					
4	B	D4		45	O	ATAPL	D/A converter monitor signal output pin for A/D converter low reference voltage.
5	B	D3					
6	B	D2		46	P	AGND	Analog system ground pin.
7	B	D1		47	B	PD7/SD	DMA output pin/serial data output pin.
8	B	D0		48	B	PD6/SDCK	DMA output pin/serial data transmission clock pin.
9	P	DGND	Digital system ground pin.				
10	P	DVDD	Digital system power supply pin.	49	P	DGND	Digital system ground pin.
11	I	A8	CPU interface address bus pin A12 is the MSB pin, and A0 is the LSB pin.	50	B	PD5/SDE	DMA output pin/serial date output valid period signal pin.
12	I	A7					
13	I	A6		51	B	PD4/PP4	DMA output pin/general-purpose I/O port pin.
14	I	A5		52	B	PD3/PP3	
15	I	A4		53	B	PD2/PP2	
16	I	A3		54	B	PD1/PP1	
17	P	DGND	Digital system ground pin.	55	B	PD0/PP0	
18	I	A2	CPU interface address bus pin.	56	P	DVDD	Digital system power supply pin.
19	I	A1		57	B	$\overline{\text{DACK}}$/PP5	DMA data acknowledge signal input pin/general-purpose I/O port pin.
20	I	A0					
21	I	$\overline{\text{WR}}$	CPU interface write signal pin.	58	B	DREQ/PP6	DMA data request signal output pin/ general-purpose I/O port pin.
22	I	$\overline{\text{RD}}$	CPU interface read signal pin.				
23	I	A12	CPU interface address bus pin.	59	B	MTP/PP7	Motor drive timing signal output pin/ general-purpose I/O port pin.
24	P	DVDD	Digital system power supply pin.				
25	I	CLKIN	System clock input pin.	60	O	CLK2	Sensor drive timing signal output pin.
26	I	A11	CPU interface address bus pin.	61	O	CLK1	
27	I	A10		62	O	RS	
28	I	A9		63	O	SH	
29	I	$\overline{\text{CS}}$	CPU interface chip select signal pin.	64	P	DGND	Digital system ground pin.
30	I	ICLK	External sampling point signal input pin.				
31	I	TRIG	External trigger signal input pin.				
32	I	$\overline{\text{RESET}}$	System reset pin.				
33	O	SAMP/LININT	A/D converter sampling point monitor signal output pin/LINE signal output pin.				
34	I	TEST	Test pin (Connect to ground in normal use.)				
35	I	$\overline{\text{REF}}$	DRAM refresh signal input pin.				
36	P	AGND	Analog system ground pin.				
37	I	DALRL	D/A converter low reference voltage pin for A/D converter low reference voltage.				
38	I	DAHRL	D/A converter low reference voltage pin for A/D converter high reference voltage.				
39	I	AIN	Sensor signal input pin.				
40	I	TEMP	Temperature signal input pin.				
41	O	ATAPH	D/A converter monitor signal output pin for A/D converter high reference voltage.				
42	I	DAHRH	D/A converter high reference voltage pin for A/D converter high reference voltage.				

Note : Not using the input pins must be connected to “Digital system power supply or ground”.

LZ9FJ59 (IC8) Terminal list

PIN	I/O	Name	Function	PIN	I/O	Name	Function
1	IO2M	RTCDT	RTC data input/output	51	IO2M	D12	System data input/output
2	O2M	RTCCK	RTC data transfer clock	52	IO2M	D11	System data input/output
3	O2M	RTCCE	RTC chip select	53	IO2M	D10	System data input/output
4	O2M	RTCIO	RTC input/output control	54	I	A7	System address input
5	TO	GAIN	Output port	55	I	A6	System address input
6	I	MTSTART	Input port	56	I	A5	System address input
7	I	LCINT	Interrupt request signal from LC82103	57	I	A4	System address input
8	O2M	XLCCS	Chip select signal to LC82103	58	I	A3	System address input
9	O	AO9	Reading/QM-coder LSI address output	59	I	A2	System address input
10	O	AO10	Reading/QM-coder LSI address output	60	IS	SHCK	Clock (19.6MHz) from CPU
11	–	GND	Ground	61	–	GND	Ground
12	O	AO11	Reading/QM-coder LSI address output	62	–	VDD	Power supply
13	O	AO12	Reading/QM-coder LSI address output	63	I	A1	System address input
14	O2M	XLCRD	Read signal to LC82103	64	I	A0	System address input
15	O2M	XLCWR	Write signal to LC82103	65	IO2M	D9	System data input/output
16	O	AO0	Reading/QM-coder LSI address output	66	IO2M	D8	System data input/output
17	O	AO1	Reading/QM-coder LSI address output	67	IO2M	D7	System data input/output
18	O	AO2	Reading/QM-coder LSI address output	68	IO2M	D6	System data input/output
19	O	AO3	Reading/QM-coder LSI address output	69	IO2M	D5	System data input/output
20	–	VDD	Power supply	70	IO2M	D4	System data input/output
21	–	GND	Ground	71	IO2M	D3	System data input/output
22	O	AO4	Reading/QM-coder LSI address output	72	IO2M	D2	System data input/output
23	O	AO5	Reading/QM-coder LSI address output	73	IO2M	D1	System data input/output
24	O	AO6	Reading/QM-coder LSI address output	74	IO2M	D0	System data input/output
25	O	AO7	Reading/QM-coder LSI address output	75	–	GND	Ground
26	O	AO8	Reading/QM-coder LSI address output	76	IS	XRESET	Reset signal
27	O	CRNT	Output port	77	O2M	XINT7	Interrupt request signal to CPU
28	–	GND	Ground	78	O2M	XINT4	Interrupt request signal to CPU
29	O	TXB1	B-phase current control output 1	79	O2M	XWAIT	Wait request signal to CPU
30	O	TXB0	B-phase current control output 0	80	I	XRAS	Input RAS signal from CPU
31	O	TXA1	A-phase current control output 1	81	I	A18	System address input
32	O	TXA0	A-phase current control output 0	82	I	A19	System address input
33	O	TXPB	B-phase current direction setting	83	I	A20	System address input
34	O	TXPA	A-phase current direction setting	84	I	A21	System address input
35	I	A12	System address input	85	I	XCS2	Chip select 2 signal input
36	I	A11	System address input	86	I	XCS6	Chip select 6 signal input
37	I	A10	System address input	87	I	XWRL	System write (high-order byte) signal
38	I	A9	System address input	88	I	XWRH	System write (low-order byte) signal
39	I	A8	System address input	89	I	XRD	System read signal
40	–	GND	Ground	90	I	XDACK0	DMA acknowledge 0 input from CPU
41	ID	QMPDRQ	DMA request input (QM-coder)	91	O2M	XDREQ0	DMA request 0 output to CPU
42	O2M	XQMPDAK	DMA acknowledge output (QM-coder)	92	I	XDACK1	DMA acknowledge 1 input from CPU
43	ID	QMCDRQ	DMA request input (QM-coder)	93	O2M	XDREQ1	DMA request 1 output to CPU
44	O2M	XQMCDAK	DMA acknowledge output (QM-coder)	94	O2M	XGABCS	Chip select (gate array B)
45	O2M	XQMRD	Read signal to QM-coder	95	O2M	XSRAMCS	Chip select (SRAM)
46	O2M	XQMWR	Write signal to QM-coder	96	O2M	XPGMCS	Chip select (ROM)
47	O2M	XQMCS	Chip select signal to QM-coder	97	I	XMDMINT	Interrupt request signal from Modem
48	IO2M	D15	System data input/output	98	O2M	XMDMCS	Chip select (Modem)
49	IO2M	D14	System data input/output	99	O	XMDMRST	Modem reset output
50	IO2M	D13	System data input/output	100	–	VDD	Power supply

LZ9FJ59 (IC8) Terminal list

PIN	I/O	Name	Function	PIN	I/O	Name	Function
101	–	GND	Ground	131	O2M	XD6004RD	Read signal to D6004 (PC I/F)
102	O2M	XEXCS	Chip select (spare)	132	O2M	XD6004WR	Write signal to D6004 (PC I/F)
103	I	XCDCINT	Interrupt request signal from CODEC	133	O2M	D6004ALE	Address strobe signal to D6004 (PC I/F)
104	I	XCDCDRQ	DMA request signal (CODEC)	134	–	GND	Ground
105	O2M	XCDCCS	Chip select (CODEC)	135	IO	AD7	PC I/F address/data input/output
106	O	XWR	System write output	136	IO	AD6	PC I/F address/data input/output
107	O2M	FLBK4	Bank control 4	137	IO	AD5	PC I/F address/data input/output
108	O2M	FLBK3	Bank control 3	138	IO	AD4	PC I/F address/data input/output
109	O2M	FLBK2	Bank control 2	139	IO	AD3	PC I/F address/data input/output
110	O2M	FLBK1	Bank control 1	140	IO	AD2	PC I/F address/data input/output
111	IU	XFLBSY	Flash memory busy signal input	141	–	GND	Ground
112	IU	FLSZ0	Input port	142	–	VDD	Power supply
113	IU	FLSZ1	Input port	143	IS	CK16M	16MHz clock input
114	O2M	XFLSTD	Chip select (flash standard)	144	ID	TEST1	Test terminal
115	O2M	XFLOPT	Chip select (flash option)	145	IO	AD1	PC I/F address/data input/output
116	IU	XCI	Input port	146	IO	AD0	PC I/F address/data input/output
117	IU	XRHS	Input port	147	IU	XB4FRS	Input port
118	IU	XEXHS	Input port	148	IU	XFRSNS	Input port
119	TO	DPON	Output port	149	IU	XORGSNS	Input port
120	–	GND	Ground	150	IU	XROLSNS	Input port
121	TO	TXMUTE	Output port	151	I	PRTSNS1	Input port
122	IU	HSDTCT	Input port	152	TO	CDCMSK	Output port
123	TO	MPXC	Output port	153	TO	PLG0ON	Plunger 0 control
124	TO	MPXB	Output port	154	TO	PLG1ON	Plunger 1 control
125	TO	DPMUTE	Output port	155	TO	LEDON	CIS LED light source control
126	IU	PCDTCT	Input port	156	IU	XEXINT0	Interrupt request signal from PC I/F
127	TO	FAXPCSL	Output port	157	IU	XEXINT1	Interrupt request signal (spare)
128	O2M	XD9001CS	Chip select (PC I/F D9001)	158	I	PCIFSL	PC I/F select signal input
129	O2M	XD9001RW	Read signal to D9001 (PC I/F)	159	IO2M	IOP0	Input port (spare)
130	O2M	XD9001WR	Write signal to D9001 (PC I/F)	160	–	GND	Ground

I : Input terminal (TTL level input)
IS : Input terminal (TTL level schmitt input)
IU : Input terminal (TTL level input, pull up resistor 250 KΩ building in)
ID : Input terminal (TTL level input, pull down resistor 250 KΩ building in)
IO : Input/output terminal (TTL level input, output electric current: I_{OL}=4.0 mA)
IO2M : Input/output terminal (TTL level input, output electric current : I_{OL}=2.0 mA)
O : Output terminal (Output electric current: I_{OL}=4.0 mA)
O2M : Output terminal (Output electric current: I_{OL}=2.0 mA)
TO : Try-state output terminal (Output electric current: I_{OL}=4.0 mA)
VDD : Power supply
GND : Ground

(8) Gate Array (B) Block

The block is composed of the Gate Array (B) and SRAM (2 KByte).

1) LR38292(IC22) ... pin-160, QFP (Gate Array B)

The device has the following functions.

① Printing Data Process
The image data of the page memory for printing is converted into 400 dpi, and the smoothing and contracting processes are applied.

② Printer (PCU) Interface
The control of resetting and so on to PCU and the image data processed in Item ① above are synchronized with the signal (HSYNC) from PCU and are transmitted to PCU in the serial mode.

③ DMA Controller
(a) The binary-coded data of the draft transmitted in the serial mode from the Gate Array (A) LZ9FJ59(IC8) and read with the scanner are transmitted to the page memory.
(b) The image data which will be printed are read from the page memory, and the process ① is applied to transmit the data to PCU in the serial mode.

④ CODEC (HD813201F) Interface
(a) The timing is controlled for CPU to get an access to CODEC.
(b) The timing is controlled for CODEC to get an access to the page memory.

⑤ DRAM Controller
Since DRAM is used for the page memory, and the address, RAS and CAS are controlled and refresh-controlled.

⑥ Panel Interface
The key input detection on the operation panel, LED lighting control and LCD display control are executed.

2) LH5116NA-10 (IC30) -- pin-24, SOP (16-Kbit SRAM)

This SRAM is a line memory for the printing data process (resolution power conversion, smoothing and contracting to 404 dpi) of the Gate Array (B).

LR38292 (IC22) Terminal descriptions

Pin	Name	I/O	Function
20	VCC		Power supply
62	VCC		
100	VCC		
142	VCC		
16	GND		Ground
21	GND		
35	GND		
48	GND		
61	GND		
78	GND		
87	GND		
101	GND		
125	GND		
134	GND		
143	GND		
65	MANRESB	O	Manual reset signal
66	RESETB	I	Reset signal
89	A5	I	Address signal on the system side
90	A4		
91	A3		
92	A2		
93	A1		
70	D15	I/O	Data bus signal on the system side
71	D14		
72	D13		
73	D12		
74	D11		
75	D10		
76	D9		
77	D8		
79	D7		
80	D6		
81	D5		
82	D4		
83	D3		
84	D2		
85	D1		
86	D0		
88	CSB	I	Chip select signal of gate array LR38292
97	RDB	I	Read signal on the system bus side
98	WRB	I	Write signal on the system bus side
115	SHCK0B	O	Reversion output of clock (SHCK) from CPU
116	SHCK	I	Clock (19.6 MHz) from CPU
95	GAINTB	O	Interrupt request signal to CPU of gate array LR38292
94	CDCINTB	O	Reversion output (to CPU) of interrupt request signal from HD813201F
96	DREQ0B	O	Reversion output (to CPU) of DMA transfer request signal from HD813201F
99	RSTCDCB	O	Reset signal to HD813201F (Default: Low)
102	CDCINT	I	Interrupt request signal from HD813201F
103	BRQT	I	Bus right request signal of image bus from HD813201F
104	BACKB	O	Bus right permission signal of image bus to HD813201F
105	DRQ0	I	DMA transfer request signal from HD813201F
106	DACK0B	O	Acknowledge signal of DMA transfer to HD813201F
107	CSCDCB	I	Chip select signal to HD813201F
108	MDENB	I	Data enable signal of image bus from HD813201F
109	READY	O	Ready signal of image bus access to HD813201F
110	MAS	I	Address strobe signal of image bus of HD813201F

LR38292 (IC22) Terminal descriptions

Pin	Name	I/O	Function
111	MAENB	I	Address enable signal of image bus of HD813201F
112	CK16M	I	16 MHz clock input
113	RDCDC	O	Register read signal (active H) of HD813201F of CPU
114	RDCDCB	O	Register read signal (active L) of HD813201F of CPU
139	MA20	I	Address of image bus of HD813201F
138	MA19		
137	MA18		
136	MA17		
135	MA16		
133	MAD15	I/O	Address/data of image bus of HD813201F Input mode is selected when HD813201F gets an access to image bus (MAENB=L). Data bus to memory (page memory) is selected when gate array LR38292 gets an access to the image bus.
132	MAD14		
131	MAD13		
130	MAD12		
129	MAD11		
128	MAD10		
127	MAD9		
126	MAD8		
124	MAD7		
123	MAD6		
122	MAD5		
121	MAD4		
120	MAD3		
119	MAD2		
118	MAD1		
117	MAD0		
155	DA11	I/O	Address bus to memory of image bus (page memory) When HD813201F gets an access to the image bus, address of MA21 thru MA16, MAD15 thru MAD1 are converted to Row/Column address in the page memory (DRAM) and output. When gate array LR38292 gets an access to the image bus, Row/Column address is output to the page memory (DRAM).
154	DA10		
153	DA9		
152	DA8		
151	DA7		
150	DA6		
149	DA5		
148	DA4		
147	DA3		
146	DA2		
145	DA1		
144	DA0		
156	DWEB	O	Write signal to memory (page memory: DRAM) of image bus
157	RAS1B	O	RAS1 signal to memory (page memory: DRAM) of image bus
158	RAS0B	O	RAS0 signal to memory (page memory: DRAM) of image bus
159	CASB	O	CAS signal to memory (page memory: DRAM) of image bus
140	DRMSIZE	I	Setting of size of memory (page memory: DRAM) of image bus Low: 16 Mbits High: 12 Mbits
141	DRMTYPE	I	Setting of type of memory (page memory: DRAM) of image bus Low: Address 8-bit type High: address 12-bit type (Valid only for DRMSIZE=L. Don't care for DRMSIZE=H.)
67	STVDB	I	Serial scanner data valid range signal
68	SRVID	I	Serial scanner data
69	SCCLK	I	Serial scanner data transfer clock
51	PCURESB	O	Reset signal for printer unit
52	HSYNC	I	Main scanning synchronous signal from printer unit
53	EPRDYB	I	Communication ready signal from printer unit
54	PRRDYB	I	Printing operation ready signal of printer unit
55	TODB	I	Sub-scanning synchronous signal to printer unit

Pin	Name	I/O	Function
56	ETBSYB	I	Status sending signal of printer unit
57	CTBSYB	O	Command sending signal to printer unit
58	PRINTB	O	Printing start/continuation signal to printer unit
59	PDATA	O	Printing image data to printer unit
60	CPRDYB	O	Communication ready signal to printer unit
63	XIN	I	Clock input (quartz oscillator connection)
64	XOUT	O	Clock output (quartz oscillator connection)
38	LMA10	O	Address bus of line memory for smoothing/contracting
37	LMA9		
36	LMA8		
34	LMA7		
33	LMA6		
32	LMA5		
31	LMA4		
30	LMA3		
29	LMA2		
28	LMA1		
27	LMA0		
40	LMD7	O	Data bus of line memory for smoothing/contracting
41	LMD6		
42	LMD5		
43	LMD4		
44	LMD3		
45	LMD2		
46	LMD1		
47	LMD0		
39	LMWEB		
26	LD15	I/O	Control/data bus and LED on/off control signal to key scan and LCD driver on the operation panel
25	LD14		
24	LD13		
23	LD12		
22	LD11		
19	LD10		
18	LD9		
17	LD8		
15	LD7		
14	LD6		
13	LD5		
12	LD4		
11	LD3		
10	LD2		
9	LD1		
8	LD0		
160	SEN7	I	Key input detection signal of operation panel
1	SEN6		
2	SEN5		
3	SEN4		
4	SEN3		
5	SEN2		
6	SEN1		
7	SEN0		
49	MEMTST	I	Terminal for device test of integrated memory Low is set except in the device test mode.
50	TEST	I	Terminal for device test Low is set except in the device test mode.

(9) CODEC Block

This block is composed of CODEC, LS374 and LS244 in order to demodulate the contracted image data of the draft read with the scanner and the letter image transmitted in the DMA mode from the system memory.

1) HD813201F (IC26) ... pin-80, 6FP (CODEC)

It operates at 16 MHz corresponding to the crystal oscillator (X5) of 16 MHz.

The image memory is commonly used as the page memory. The image data of the draft read with the scanner in the page memory is contracted by MMR, and is transferred to the system memory (DRAM: IC13) by the DMA transfer function of CPU. Moreover, the image data transferred in the DMA mode from the system memory are demodulated with MMR, and are developed into the page memory.

2) HD74LS374 (IC14) ... pin-20, SOP

The data hold time during writing from Main CPU to HD813201F is assured.

3) HD74LS244 (IC20) ... pin-20, SOP

When the Main CPU reads the inner register of HD813201F, it will read the data through this buffer.

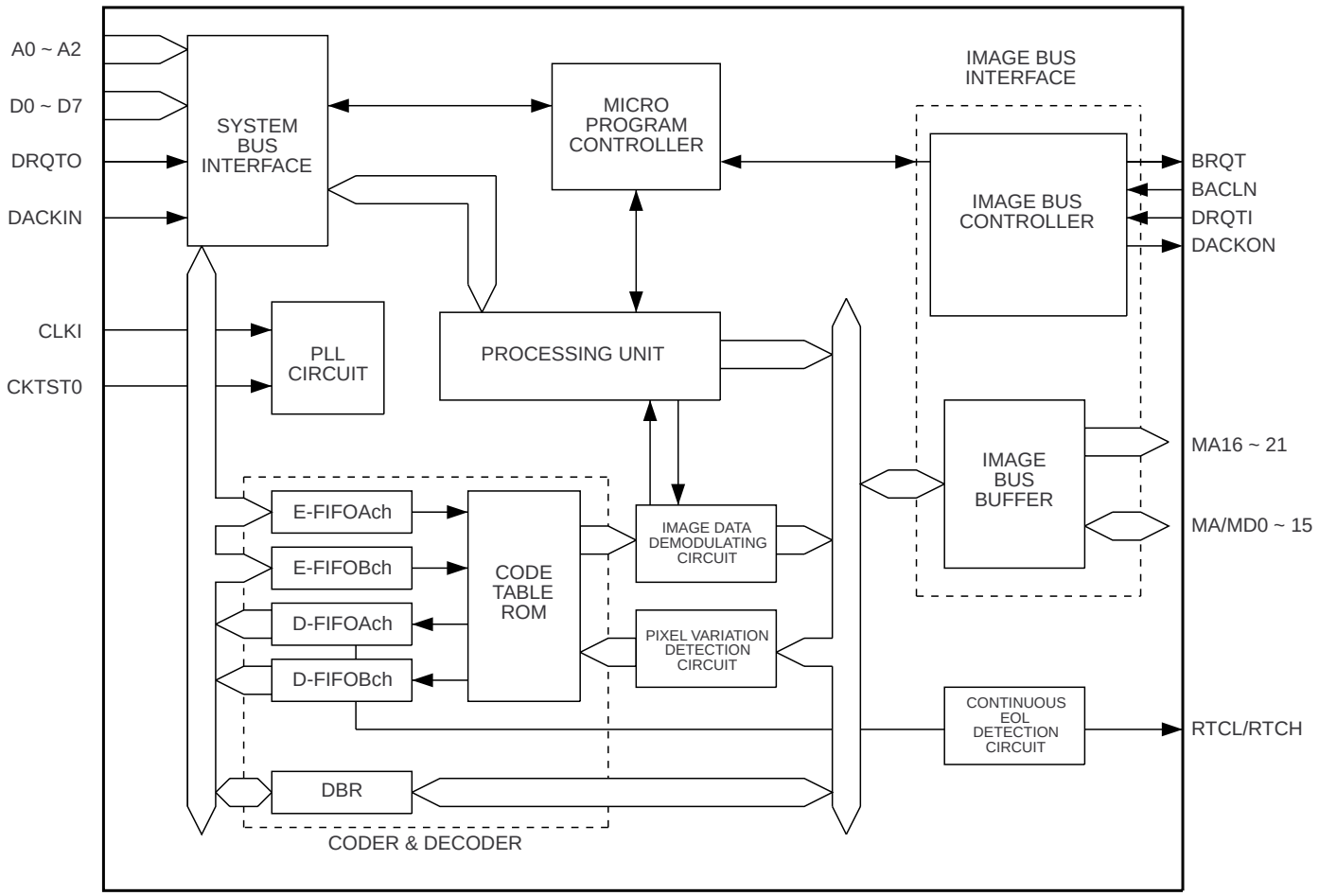


Fig. 3

HD813201F (IC26) Terminal descriptions

Code	Terminal No.	I/O	Function
$\overline{68}$/80	56	I	If this terminal is at "low" level, it indicates that MPU of system 88 is connected to IDP201. "High" level indicates that MPU of system 80 is connected.
A0	57	I	Addresses 0 thru 2 (address terminals). It is connected to the low-order 3 bits of the system address bus, and MPU is used to get an access to the internal register of IDP201.
A1	54		
A2	55		
D0	64	I/O, Three-state output	Data 0 thru 7 (data terminals). They are connected to the system data bus for bidirectional data transfer between MPU and IDP201. MPU can read and write the internal register of IDP201.
D1	62		
D2	65		
D3	63		
D4	67		
D5	66		
D6	68		
D7	69		
$\overline{CS}$	44	I	Chip select (chip select terminal). When the terminal is at "low" level, it indicates that MPU gets an access to the internal register of IDP201.
DS	45	I	Data strobe (data strobe terminal). Connect ϕ2 clock pin of MPU of system 88 or $\overline{RD}$ pin of MPU of system 80.
R/$\overline{W}$	42	I	Read/write (read/write terminal). Connect R/$\overline{W}$ pin of MPU of system 88 or $\overline{WR}$ pin of MPU of system 80.
$\overline{RESET}$	59	I	Reset element. If the signal of "low" level is input to the terminal, IDP201 will be initialized.
IRQT	58	O	Interrupt request (interrupt request terminal). When the signal of "high" level is output, IDP201 requests the interrupt process for MPU. The factor of the interrupt is the end of the command process, the end of DMA transfer, occurrence of an error during demodulation or the receiving of RTC code. MPU reads IRR (interrupt request register) which is one of the internal registers of IDP201, and can know the factor of the interrupt. When MPU reads IRR, IRQT becomes "low" level. (For details of IRR, refer to "8.1.2 Interrupt request register".)
DRQTO	47	O	DMA Request Output (DMA request output terminal). In the following cases, DMA transfer can be requested for DMAC by turning DRQTO to "high". (1) During coding, a code of 1 byte or more is stored in E-FIFO. (2) During decoding, an empty area of 1 byte or more is present. (3) During data transfer between the system bus and image bus, DBR is read to read or write.
$\overline{DACKI}$	46	I	DMA Acknowledge Input (DMA acknowledge input terminal) The response signal for DRQTO is input. If $\overline{DACKI}$ becomes "low" level during coding or decoding, the access is given to E-FIFO or D-FIFO. If $\overline{DACKI}$ becomes "low" level during data transfer between system bus and image bus, the access is given to DBR. Don't make $\overline{CS}$ and $\overline{DACKI}$ "low" at the same time.
BRQT	52	O	Bus Request (Bus request terminal). IDP201 outputs the signal of "high" level from BRQT, and IDP201 requests the bus master for the device which can become another bus master on the image bus. If any other device which can become the bus master on the image bus, BRQT becomes the NC pin.
$\overline{BACK}$	48	I	Bus Acknowledge (bus acknowledge terminal). The response signal for BRQT is input. If the signal of "low" level is input to $\overline{BACK}$, it indicates that it is approved for IDP201 to become the bus master of the image bus. If any other bus master which can become the bus master is not present except IDP201, fix this terminal at "low".
$\overline{MAEN}$	76	O	Memory Address Enable (Memory address enable terminal). IDP201 outputs the signal of "low" level from $\overline{MAEN}$ to declare that it becomes the bus master of the image bus. When $\overline{MAEN}$ is at "high", the three-state output which is connected to the image bus becomes all into the high impedance state.

HD813201F (IC26) Terminal descriptions

Code	Terminal No.	I/O	Function
MAS	74	O	Memory Address Strobe (Memory address strobe terminal). When MAS becomes "high" level, it indicates that address is output to MA/MD0 thru MA/MD15 and MA16 thru MA21.
UDS	27	Three-state output	Upper Data Strobe (high-order data strobe terminal). When $\overline{\text{UDS}}$ becomes "low" level, it indicates that IDP201 uses the high-order byte of the image bus.
$\overline{\text{LDS}}$	23	Three-state output	Upper Data Strobe (low-order data strobe terminal). When $\overline{\text{LDS}}$ becomes "low" level, it indicates that IDP201 uses the low-order byte of the image bus.
$\overline{\text{MDEN}}$	25	O	Memory Data Bus Enable (Memory data bus enable terminal). When $\overline{\text{MDEN}}$ output terminal becomes "low" level, it indicates that valid data are present in MA/MD0 thru MA/MD15. This output terminal is used to control the output of the bidirectional bus buffer on MA/MD0 thru MA/MD15.
MA/MD 0	79	I/O, Three-state output	Memory Address Data Bus 0 thru 15 (Memory address data bus). In this bus for image bus operation, the address and data are multiplexed. MA/MD0 thru MA/MD15 are used as follows. (1) When $\overline{\text{MAEN}}$ is "low" and MAS is "high", it is used as the output address line. (2) When both $\overline{\text{MAEN}}$ and $\overline{\text{MDEN}}$ are "low" in the reading cycle, it is used as the input data line. (3) When both $\overline{\text{MAEN}}$ and $\overline{\text{MDEN}}$ are "low" in the writing cycle, it is used as the input data line.
MA/MD 1	77		
MA/MD 2	3		
MA/MD 3	78		
MA/MD 4	5		
MA/MD 5	2		
MA/MD 6	6		
MA/MD 7	4		
MA/MD 8	8		
MA/MD 9	7		
MA/MD10	12		
MA/MD11	9		
MA/MD12	14		
MA/MD13	13		
MA/MD14	15		
MA/MD15	16		
MA16	71	Three-state output	Memory Address Bus 16 thru 21 (memory address bus). When $\overline{\text{MAEN}}$ is "low" and MAS is "high", it is used as the output address line.
MA17	11		
MA18	30		
MA19	31		
MA20	50		
MA21	51		
$\overline{\text{MR}}$	26	Three-state output	Memory Read (Memory read terminal). When $\overline{\text{MR}}$ is turned to "low" level, IDP201 reads the data from the image memory.
$\overline{\text{MW}}$	28	Three-state output	Memory Write (memory write terminal). When $\overline{\text{MW}}$ is turned to "low" level, IDP201 writes the data in the image memory.
$\overline{\text{IOR}}$	35	Three-state output	I/O Read (I/O read terminal). When $\overline{\text{IOR}}$ is turned to "low" level, IDP201 reads the data from I/O device on the image bus. However, it is limited at DMA transfer during data transfer with the transfer command and the coding process.
$\overline{\text{IOW}}$	36	Three-state output	I/O Write (I/O write terminal). When $\overline{\text{IOW}}$ is turned to "low" level, IDP201 writes the data in I/O device on the image bus. However, it is limited at DMA transfer during data transfer with the transfer command and the decoding process.
DRQTI	39	I	DMA Request Input (DMA request input terminal). When I/O device on the image bus requests DMA for IDP201, DRQTI becomes "high" level.
$\overline{\text{DACKO}}$	38	O	DMA Acknowledge Output (DMA acknowledge output terminal). When this output terminal is turned to "low" level, IDP201 informs to the peripheral devices on the image bus that DMA operation is approved.
$\overline{\text{DMA}}$	32	O	Direct Memory Access (Direct memory access terminal). When $\overline{\text{DMA}}$ output is turned to "low", it indicates that DMA transfer is executed. In the coding process, the data is transferred from the I/O device (scanner) to the image memory. In the decoding process, the data is transferred from the image memory to I/O device (printer).

HD813201F (IC26) Terminal descriptions

Code	Terminal No.	I/O	Function
DTC	37	O	DMA Terminal Count (DMA terminal count terminal). When DTC output is turned to "high", it indicates that DMA transfer of the setting line part is ended.
READY	73	I	Image memory or I/O device read. When READY is turned to "high" during writing, it indicates that the image memory or I/O device is ready for transmitting/receiving the data. When READY is "high", IDP201 will wait until READY becomes "high".
<Power terminal>			
V_{DD} 1	29	I	Power voltage (+5V)
V_{DD} 2	49	I	
V_{DD} 3	72	I	
V_{SS} 1	10	I	
V_{SS} 2	17	I	Ground
V_{SS} 3	34	I	
V_{SS} 4	53	I	
V_{SS} 5	70	I	
V_{SS} 6	75	I	
<Other>			
TEST 0	18	I	Fix these terminals at "low".
TEST 1	22	I	
TEST 2	24	I	
TEST 3	33	I	
TEST 4	43	I	

Code	Terminal No.	I/O	Name and function
CLKI	19	I	Quartz oscillation input terminal and external clock input terminal.
CLKX	20	O	Quartz oscillation output terminal.
CKTST1	1	I	Low pass filter terminal of PLL circuit. Connected to capacitor (1000pF) and resistor (10kΩ) through GND.
CLKMOD	40	I	Terminal to switch quartz oscillation connection or external clock input mode. "0": Quartz oscillation. "1": External clock.
CKTST0	41	I	Fix at "LOW" level.
CLKO	21	O	Clock output terminal. Rectangular wave which is synchronous with the internal clock of IDP201 is output.
CKTST2	80	I	Fix at "LOW" level.

Code	Terminal No.	I/O	Name and function
RTCH	60	O	Number of transfers of EOL detected by IDP201 during RTC receiving is reflected at the terminal.
RTCL	61	O	

(10) Page Memory Block

The Page Memory Block is composed of one DRAM of 1M × 16 bits, being commonly used as the Image Memory. The memory is divided into the Page Memory for the scanner and the Page Memory for printing.

The Page Memory for scanner is composed of the partial area of IC23. The image data of approx. one page (except in the super fine mode) of the draft read with the scanner can be stored. They are stored until they are contracted by CODEC.

The Page Memory for printing is composed of the remaining areas of IC23 and can store approx. one page of the image data decoded by CODEC. The data are stored until they are transferred to PCU with the Gate Array (B) and printed.

(11) Driver Block

Sending Motor Driver (IC7: LB1845) ---- 28-pin DIP
This IC driver at the sending motor at the constant current with the bipolar, chopper system.

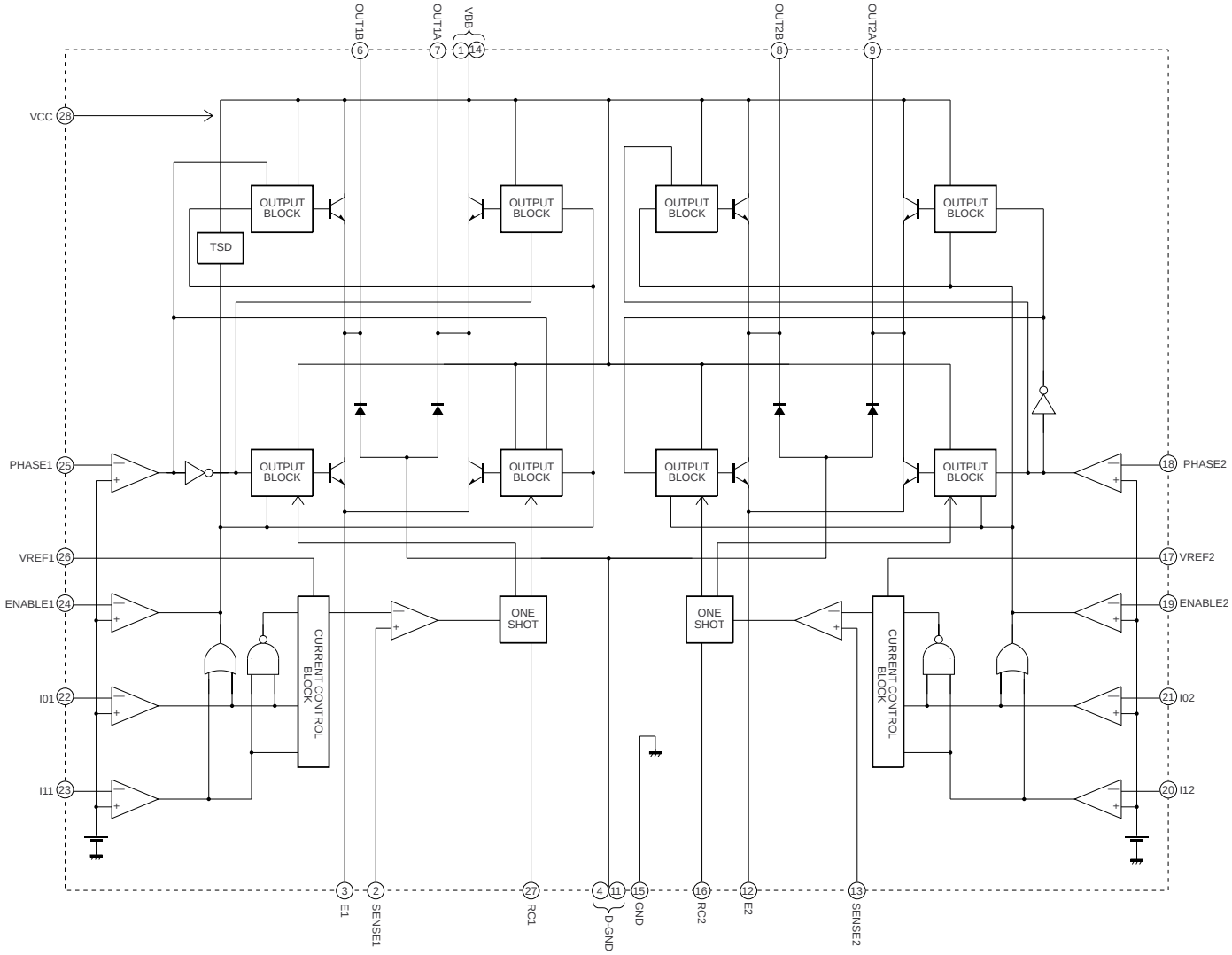


Fig. 4

[Truth Table]

ENABLE	PHASE	OUTA	OUTB
L	H	H	L
L	L	L	H
H	–	OFF	OFF

I_0	I_1	Output Current
L	L	Vref/ (10 x R_E) = I_{OUT}
H	L	Vref/ (15 x R_E) = I_{OUT} x 2/3
L	H	Vref/ (30 x R_E) = I_{OUT} x 1/3
H	H	0

Note: When ENABLE = H or I_0 = I_1 = H, the output is in OFF state.

[Pin Functions]

Pin name	Pin No.	Pin Description
VBB	1, 14	Output stage power-supply voltage
SENSE1 SENSE2	2 13	Set current detection pins. Connect these pins, fed back through noise filters, to E1, and E2.
E1 E2	3 12	Current control pins by connecting between this pin and GND.
DGND	4,11	Internal diode anode connection
OUT1B OUT1A OUT2B OUT2A	6 7 8 9	Output pins
GND	15	Ground
RC1 RC2	27 16	Used to set the output off time for the switched output signals. The fixed off times are set by the capacitors and resistors connected to these pins. t off ≒ CR
Vref1 Vref2	26 17	Output current settings The output current is determined by the voltage (in the range 1.5 to 7.5V) input to these pins.
PHASE1 PHASE2	25 18	Output phase switching inputs. [H] input : OUT A = high, OUT B = low [L] input : OUT A = low, OUT B = high
ENABLE1 ENABLE2	24 19	Output on/off settings [H] input : output OFF [L] input : output ON
I01, I11 I02, I12	22, 23 21, 20	Digital inputs that set the output current The output currents can be set to 1/3, 2/3, or full by setting these pins to appropriate combinations of high and low levels.
VCC	28	Logic block power supply.

(12) DPRAM I/F Block

The Main CPU communicates with the Sub CPU on the Line Control PWB by the DPRAM.
This block functions for handshaking with the DPRAM.

[3] Circuit description of Line Control PWB

1. General description

The Line Control PWB is composed of the following blocks.

① Sub CPU Block
② Modem Block
③ Sub EPROM, DRAM Block
④ Dual Port RAM Block
⑤ Connector Block (CNSUB)
⑥ Sub Access Control Block
⑦ Gate Array (A) Block
⑧ JBIG Block

(1) Sub CPU Block

The Sub Control Block uses RISC microprocessor HD6437021 as CPU, being composed of ROM (1 MByte) and DRAM (2 MByte).

1) HD6437021 (IC15): pin-100, QFP (Main CPU)

The device is a microprocessor which integrates the peripheral functions, using CPU of 32-bit RISC type as the core. In the instrument, the following peripheral functions are mainly used.

① ROM of 32 KByte and RAM of 1 KByte are integrated.
A part of programs are stored in the integrated ROM.

② DMA Controller (4 channels are provided, and 2 channels alone are used.)
ch.0: Used to transmit coding image data between QM-CODER (IC3) and DRAM(IC10).
ch.1: Used to transmit image data between QM-CODER and DRAM(IC10).

③ Clock-synchronous type serial communication interface commands and statuses are communicated with PCU.

④ Interruption
$\overline{IRQ4}$: Interruption request from Gate Array (A) (LZ9FJ59)
$\overline{IRQ6}$: Interruption request from Modem.
$\overline{IRQ7}$: Interruption request from Dual Port RAM.
$\overline{IRQ0}$, $\overline{IRQ1}$, $\overline{IRQ2}$, $\overline{IRQ3}$, $\overline{IRQ5}$: Not used.
$\overline{NMI}$: Not used.

⑤ DRAM Controller
Addressing to DRAM(IC10) of the system and control and refresh control of $\overline{RAS}$ and $\overline{CAS}$ signals are executed.

⑥ Timer and Watch Dog Timer

⑦ General-purpose I/O Port
Control of LIU are executed.

⑧ Clock Oscillation
Ceramic oscillator of 19.66 MHz is connected for operation of 19.66 MHz.

HD6437021 (IC15) Terminal descriptions

Classification	Code	Terminal No. (TFP-100B)	I/O	Name	Function
Power	Vcc	13, 38, 63, 73, 80, 88	I	Power	Connect to the power supply. Connect Vcc terminals to the power units of all systems. If any open terminal is present, it will not operate
	Vss	4,15,24,32, 41,50,59,70, 81,82, 92	I	Ground	Connect to the ground. Connect Vcc terminals to the power units of all systems. If any open terminal is present, it will not operate.
Clock	EXTAL	71	I	External clock	Connect to the quartz oscillator. Moreover, EXTAL terminal can input the external clock. Use the same frequency for the quartz oscillator, external clock and system clock.
	XTAL	72	I	Crystal	Connect the quartz oscillator. Connect the same frequency of the system clock (CK). To input external clock from EXTAL terminal, open EXTAL terminal.
	CK	69	O	System clock	Supply system clock to the peripheral device.
System control	$\overline{RES}$	76	I	Reset	If this terminal is turned to the low level when NMI is at the high level, it will be brought into the power-on state. If this terminal is turned to the low level when NMI is at the low level, it will be brought into the manual reset state.
	$\overline{WDTOVF}$	75	O	Watch dog timer overflow	It is overflow output signal from WDT.
	$\overline{BREQ}$	60	I	Bus right request	Select the low level to make the external device request the release of bus right.
	$\overline{BACK}$	58	O	Bus right request acknowledge	It indicates that the bus right is released to the external device. When receiving $\overline{BACK}$ signal, the device which outputs $\overline{BREQ}$ signal can know that bus right is obtained.
Operation mode control	MD2~ MD0	79~77	I	Mode setting	The terminal determines the operation mode. During operation, don't vary any input value. The relationship between MD2 thru MD0 and operation modes are shown in the following list.
Interrupt	NMI	74	I	No-maskable interrupt	This is the interrupt request terminal which can not be masked. Either leading edge or trailing edge is selected for receiving.
	$\overline{IRQ0}$~ $\overline{IRQ7}$	65,66,67,68, 97,98,99,100	I	Interrupt request 0 thru 7	This is the interrupt request terminal which can be masked. Either level input or edge input can be selected.
	$\overline{IRQOUT}$	61	O	Interrupt request output in the slave mode	It indicates that a factor of interrupt occurs. It indicates that interrupt occurs in the bus release mode.
Address	A21~A0	45~42,40,39, 37~33,31~25, 23~20	O	Address	Address is output.
Data bus	AD15~ AD0	19~16,14, 12~5,3~1	I/O	Data bus	Bidirectional data bus of 16 bits Multiplex is possible with the low-order 16 bits of the address.
	DPH	64	I/O	High-order side data bus parity	Parity data corresponds to D15 thru D8.
	DPL	62	I/O	Low-order side data bus parity	Parity data corresponds to D7 thru D0.

(Continuing)

Relationship between MD2 thru MD0 and operation modes

MD2	MD1	MD0	Operation mode	Integrated ROM	Bus width of area 0
0	0	0	MCU mode	Invalid	8-bit size
0	0	1			16-bit size
0	1	0		Valid	—
0	1	1	(Reserved)	—	—
1	0	0	(Reserved)	—	—
1	0	1	(Reserved)	—	—
1	1	0	(Reserved)	—	—
1	1	1	(Reserved)	—	—

HD6437021 (IC15) Terminal descriptions

Classification	Code	Terminal No. (TFP-100B)	I/O	Name	Function
Bus control	$\overline{WAIT}$	54	I	Wait	It is input to insert Tw into the bus cycle during access to the external space.
	$\overline{RAS}$	52	O	Low address strobe	Timing signal of low address strobe of DRAM
	$\overline{CASH}$	47	O	High-order column address strobe	Timing signal of column address strobe of DRAM It is output for access to high-order 8 bits of data.
	$\overline{CASL}$	49	O	Low-order column address strobe	Timing signal of column address strobe of DRAM It is output for access to low-order 8 bits of data.
	$\overline{RD}$	57	O	Read	It indicates that outside is read out.
	$\overline{WRH}$	56	O	High-order write	It indicates writing at the external high-order 8 bits.
	$\overline{WRL}$	55	O	Low-order write	It indicates writing at the external low-order 8 bits.
	$\overline{CS0}$~$\overline{CS7}$	46~49, 51~54	O	Chip select 0 thru 7	Chip select signal for external memory or device
	$\overline{AH}$	61	O	Address hold	Address hold timing signal for device which uses multiplex bus of address/data
	$\overline{HBS}$, $\overline{LBS}$	20 56	O	Low-/high-order byte strobe	Strobe signal of high/low byte (Commonly used with AO, $\overline{WRH}$.)
	$\overline{WR}$	55	O	Write	Output during writing. (Commonly used with $\overline{WRL}$.)
DMAC	$\overline{DREQ0}$, $\overline{DREQ1}$	66,68	I	DMA transfer request (Channels 0 and 1)	Input terminal of DMA transfer request from external
	DACK0, DACK1	65,67	O	DMA transfer request receiving (Channels 0 and 1)	It indicates that DMA transfer request is received.
16-bit integrated timer pulse unit (ITU)	TIOCA0, TIOCB0	51, 53	I/O	ITU input capture/output conveyor (Channel 0)	Output terminal of input capture input/output conveyor
	TIOCA1, TIOCB1	62, 64	I/O	ITU input capture/output conveyor (Channel 1)	Output terminal of input capture input/output conveyor
	TIOCA2, TIOCB2	83, 84	I/O	ITU input capture/output conveyor (Channel 2)	Output terminal of input capture input/output conveyor
	TIOCA3, TIOCB3	85, 86	I/O	ITU input capture/output conveyor (Channel 3)	Output terminal of input capture input/output conveyor
	TIOCA4, TIOCB4	87, 89	I/O	ITU input capture/output conveyor (Channel 4)	Output terminal of input capture input/output conveyor
	TOCXA4, TOCXB4	90, 91	O	ITU output conveyor (Channel 4)	Output terminal of output conveyor
	TCLKA~ TCLKD	65,66,90, 91	I	ITU timer clock input	External clock input terminal to counter of ITU
Timing pattern controller (TPC)	TP15~ TP0	100~93, 91~89, 87~83	O	Timing pattern Output 15 thru 0	Output terminal of timing pattern
Serial communication interface (SCI)	TxD0, TxD1	94, 96	O	Sending data (Channels 0 and 1	Sending data output terminal of SCI0, 1
	RxD0, RxD1	93, 95	I	Receiving data (Channels 0 and 1)	Receiving data input terminal of SCI0, 1
	SCK0, SCK1	97, 98	I/O	Serial clock (Channels 0 and 1)	Clock input/output terminal of SCI0, 1
I/O port	PA15~ PA0	68~64, 62~60, 58~51	I/O	Port A	Input/output terminal of 16 bits Input/output can be assigned for each bit.
	PB15~ PB0	100~93, 91~89, 87~83	I/O	Port B	Input/output terminal of 16 bits Input/output can be assigned for each bit.

(2) Modem Block

The block is mainly composed of the modem R288F (IC1), and is provided with the following modem function.

Table 1-1. Configurations, Signaling Rates, and Data Rates

Configuration	Modulation 1	Carrier Frequency (Hz) ± 0.01%	Data Rate (bps) ± 0.01%	Symbol Rate (Symbols/Sec.)	Bits/Symbol - Data	Bits/Symbol - TCM	Constellation Points
V. 34 33600 TCM	TCM	Note 2	33600	3429 only	Note 2	Note 2	Note 2
V. 34 31200 TCM	TCM	Note 2	31200	Note 2	Note 2	Note 2	Note 2
V. 34 28800 TCM	TCM	Note 2	28800	Note 2	Note 2	Note 2	Note 2
V. 34 26400 TCM	TCM	Note 2	26400	Note 2	Note 2	Note 2	Note 2
V. 34 24000 TCM	TCM	Note 2	24000	Note 2	Note 2	Note 2	Note 2
V. 34 21600 TCM	TCM	Note 2	21600	Note 2	Note 2	Note 2	Note 2
V. 34 19200 TCM	TCM	Note 2	19200	Note 2	Note 2	Note 2	Note 2
V. 34 16800 TCM	TCM	Note 2	16800	Note 2	Note 2	Note 2	Note 2
V. 34 14400 TCM	TCM	Note 2	14400	Note 2	Note 2	Note 2	Note 2
V. 34 12000 TCM	TCM	Note 2	12000	Note 2	Note 2	Note 2	Note 2
V. 34 9600 TCM	TCM	Note 2	9600	Note 2	Note 2	Note 2	Note 2
V. 34 7200 TCM	TCM	Note 2	7200	Note 2	Note 2	Note 2	Note 2
V. 34 4800 TCM	TCM	Note 2	4800	Note 2	Note 2	Note 2	Note 2
V. 34 2400 TCM	TCM	Note 2	2400	Note 2	Note 2	Note 2	Note 2
V. 23 1200/75	FSK	1700/420	1200/75	1200	1	0	–
V. 21	FSK	1080/1750	0-300	300	1	0	–
V. 17 14400 TCM	TCM	1800	14400	2400	6	1	128
V. 17 12000 TCM	TCM	1800	12000	2400	5	1	64
V. 17 9600 TCM	TCM	1800	9600	2400	4	1	32
V. 7200 TCM	TCM	1800	7200	2400	3	1	16
V. 29 9600	QAM	1700	9600	2400	4	0	16
V. 29 7200	QAM	1700	7200	2400	3	0	8
V. 29 4800	QAM	1700	4800	2400	2	0	4
V. 27 4800	DPSK	1800	4800	1600	3	0	8
V. 27 2400	DPSK	1800	2400	1200	2	0	4
V. 21 Channel 2	FSK	1750	300	300	1	0	–

Notes:

1. Modulation legend: TCM: Trellis-Coded Modulation QAM: Quadrature Amplitude Modulation
   FSK: Frequency Shift Keying DPSK: Differential Phase Shift Keying
2. Adaptive; established during handshake:

	Carrier Frequency (Hz)	
Symbol Rate (Baud)	V. 34 Low Carrier	V.34 High Carrier
2400	1600	1800
2800	1680	1867
3000	1800	2000
3200	1829	1920
3429	1959	1959

Table 2-1. MDP Pin Signals -68- Pin PLCC

Pin	Signal Label	I/O Type	Interface 3	Pin	Signal Label	I/O Type	Interface
1	NC		NC	35	RXD	OA	DTE Serial Interface
2	NC	–	–	36	VDD2	PWR	
3	NC	–	–	37	–CTS	OA	DTE Serial Interface
4	NC	–	–	38	NC	–	–
5	–RI/TXRQ	OA	DTE Serial/DMA Interface	39	NC	–	–
6	RINGD	IA	LIU: RINGD	40	DGND3	GND	–
7	–RTS	IA	DTE serial Interface	41	VDD3	PWR	–
8	IRQ	OA	Host Parallel Interface	42	NC	–	–
9	D1	IA/OB	Host Parallel Interface	43	DGND4	GND	–
10	DGND1	GND		44	NC	–	–
11	VDD1	PWR		45	NC	–	–
12	XTLI	I	Crystal/Clock Circuit	46	EYESYNC	OA	Eye Pattern Test Circuit
13	XTLO	O	Crystal/Clock Circuit	47	–EYECLK	OA	Eye Pattern Test Circuit
14	D0	IA/OB	Host Parallel Interface	48	EYEXY	OA	Eye Pattern Test Circuit
15	D2	IA/OB	Host Parallel Interface	49	NC	–	–
16	D3	IA/OB	Host Parallel Interface	50	TDCLK	OA	DTE Serial Interface
17	D5	IA/OB	Host Parallel Interface	51	–RLSD	OA	DTE Serial Interface
18	D7	IA/OB	Host Parallel Interface	52	–RDCLK	OA	DTE Serial Interface
19	DGND2	GND		53	GP0	MI	MDP: EYESYNC
20	RS0	IA	Host Parallel Interface	54	XTCLK	IA	DTE Serial Interface
21	5VA	PWR		55	DGND5	GND	
22	AGND1	GND		56	VDD4	PWR	
23	RIN	I(DA)	Line Interface	57	TXD	IA	DTE Serial Interface
24	VC	MI	To GND through capacitors	58	–DSR/RXRQ	OA	DTE Serial/DMA Interface
25	VREF	MI	To VC through capacitors	59	–RESET	OA	Host Parallel Interface
26	TXA2	O (DD)	Line Interface	60	–READ	IA	Host Parallel Interface
27	TXA1	O (DD)	Line Interface	61	–WRITE	IA	Host Parallel Interface
28	–TALK (–RLYB)	OA	Line Interface	62	–CS	IA	Host Parallel Interface
29	SPKR	O (DF)	Speaker Circuit	63	RS4	IA	Host Parallel Interface
30	AGND2	GND		64	RS3	IA	Host Parallel Interface
31	–OHRC (–RLYA)	OD	Line Interface	65	RS2	IA	Host Parallel Interface
32	–POR	MI	MDP: –RESET	66	RS1	IA	Host Parallel Interface
33	NC	–	–	67	D6	IA/OB	Host Parallel Interface
34	–DTR	IA	DTE Serial Interface	68	D4	IA/OB	Host Parallel Interface

Notes:

1. I/O types:
   - MI= Modem interconnect.
   - IA, IB= Digital input
   - OA, OB = Digital output
   - I (DA) = Analog input
   - O (DD), O (DF) = Analog output
2. NC= No external connection allowed
3. Interface Legend:
   - MDP = Modem Data Pump
   - DTE = Data Terminal Equipment

The above functions are controlled by getting an access to the Interface Memory in the Modem through the data bus from CPU (IC15) of the Main Control PWB. The Interface Memory is composed of 32 8-bit registers, and is controlled with the bank switch. Accordingly, the register is selected by the register selection signals (RS4 to RS0) of 5 bits and chip selection signal (CS). The major content controlled by these registers is as follows.

1) Configuration Register

Mode setting of V34, V17, V29, V27, G2, FSK and tone transmission.

2) Option Register

Equalizing method of equalizer, carrier detection threshold, addition of echo suppressor protect tone, and setting of transmission/reception mode.

3) Others

G2AGC control, tone frequency setting, and so on.

Moreover, data is read from these registers through the data bus to monitor the statuses of the modem such as tone detection, training pattern detection and so on.

Next, transmission/reception operation is described.

During sending, the sent data is given from the Control Block to the Modem through the data bus. Then, it is modulated and sent to LIU PWB with SIGTX signal. During receiving, the received data is sent from LIU PWB to the Modem with SIGRX signal and is demodulated. Then, it is sent to the Control Block with the data bus. The above operation is done with the Modem LSI (IC).

(3) Sub ROM, DRAM Block

1) 27C4002 (IC14): pin-40, DIP (ROM)

Programs are stored in two 4 Mbit ROM.

2) HY5118164 or MSM5118165 (IC10): pin-42, SOJ (DRAM)

Used as the system memory of Main CPU and transmission buffer of communication.

(4) Dual Port RAM Block

Dual Port RAMs allow Main CPU and Sub CPU to communicate with each other by passing data through the common memory.

1) IDT7130SA55PF (IC4)

2) IDT7140SA55PF (IC6)

The IDT7130/IDT7140SA55PF are high-speed 1K x 8 Dual-Port Static RAMs. The IDT7130SA55PF is designed to be used as a stand-alone 8-bit Dual-Port RAM or as a "MASTER" Dual-Port RAM together with the IDT7140SA55PF "SLAVE" Dual-Port in 16-bit-or-more word width systems. Using the IDT MASTER/SLAVE Dual-Port RAM approach in 16-or-more-bit memory system applications results in full-speed, error-free operation without the need for additional discrete logic.
Both devices provide two independent ports with separate control, address, and I/O pins that permit independent asynchronous access for reads or writes to any location in memory.

(5) Connector Block (CNSUB)

- CNSUB of 60 pin connector connect the Main Control PWB with the Line Control PWB.

(6) Sub Access Control Block

The block control the write access to the Dual Port RAMs (IC4, 6) and the Modem (IC1).

(7) Gate Array (A) Block

This block is mainly composed of the Gate Array (A) (IC5: LZ9FJ59), and has the following functions.

① Mapper
Mapping is executed in the memory area of the memories, Gate Array (B), Modem, CODEC and Reading Process LSI (LC82103).

② LSI Interface for QM-CODER
Control of QM-CODER LSI.

③ I/O PORT
LIU control, and Speaker Volume Control (only Line-1 Control PWB)

LZ9FJ59 (IC5) Terminal list

PIN	I/O	Name	Function	PIN	I/O	Name	Function
1	IO2M	RTCDT	RTC data input/output	51	IO2M	D12	System data input/output
2	O2M	RTCCK	RTC data transfer clock	52	IO2M	D11	System data input/output
3	O2M	RTCCE	RTC chip select	53	IO2M	D10	System data input/output
4	O2M	RTCIO	RTC input/output control	54	I	A7	System address input
5	TO	GAIN	Output port	55	I	A6	System address input
6	I	MTSTART	Input port	56	I	A5	System address input
7	I	LCINT	Interrupt request signal from LC82103	57	I	A4	System address input
8	O2M	XLCCS	Chip select signal to LC82103	58	I	A3	System address input
9	O	AO9	Reading/QM-coder LSI address output	59	I	A2	System address input
10	O	AO10	Reading/QM-coder LSI address output	60	IS	SHCK	Clock (19.6MHz) from CPU
11	–	GND	Ground	61	–	GND	Ground
12	O	AO11	Reading/QM-coder LSI address output	62	–	VDD	Power supply
13	O	AO12	Reading/QM-coder LSI address output	63	I	A1	System address input
14	O2M	XLCRD	Read signal to LC82103	64	I	A0	System address input
15	O2M	XLCWR	Write signal to LC82103	65	IO2M	D9	System data input/output
16	O	AO0	Reading/QM-coder LSI address output	66	IO2M	D8	System data input/output
17	O	AO1	Reading/QM-coder LSI address output	67	IO2M	D7	System data input/output
18	O	AO2	Reading/QM-coder LSI address output	68	IO2M	D6	System data input/output
19	O	AO3	Reading/QM-coder LSI address output	69	IO2M	D5	System data input/output
20	–	VDD	Power supply	70	IO2M	D4	System data input/output
21	–	GND	Ground	71	IO2M	D3	System data input/output
22	O	AO4	Reading/QM-coder LSI address output	72	IO2M	D2	System data input/output
23	O	AO5	Reading/QM-coder LSI address output	73	IO2M	D1	System data input/output
24	O	AO6	Reading/QM-coder LSI address output	74	IO2M	D0	System data input/output
25	O	AO7	Reading/QM-coder LSI address output	75	–	GND	Ground
26	O	AO8	Reading/QM-coder LSI address output	76	IS	XRESET	Reset signal
27	O	CRNT	Output port	77	O2M	XINT7	Interrupt request signal to CPU
28	–	GND	Ground	78	O2M	XINT4	Interrupt request signal to CPU
29	O	TXB1	B-phase current control output 1	79	O2M	XWAIT	Wait request signal to CPU
30	O	TXB0	B-phase current control output 0	80	I	XRAS	Input RAS signal from CPU
31	O	TXA1	A-phase current control output 1	81	I	A18	System address input
32	O	TXA0	A-phase current control output 0	82	I	A19	System address input
33	O	TXPB	B-phase current direction setting	83	I	A20	System address input
34	O	TXPA	A-phase current direction setting	84	I	A21	System address input
35	I	A12	System address input	85	I	XCS2	Chip select 2 signal input
36	I	A11	System address input	86	I	XCS6	Chip select 6 signal input
37	I	A10	System address input	87	I	XWRL	System write (high-order byte) signal
38	I	A9	System address input	88	I	XWRH	System write (low-order byte) signal
39	I	A8	System address input	89	I	XRD	System read signal
40	–	GND	Ground	90	I	XDACK0	DMA acknowledge 0 input from CPU
41	ID	QMPDRQ	DMA request input (QM-coder)	91	O2M	XDREQ0	DMA request 0 output to CPU
42	O2M	XQMPDAK	DMA acknowledge output (QM-coder)	92	I	XDACK1	DMA acknowledge 1 input from CPU
43	ID	QMCDRQ	DMA request input (QM-coder)	93	O2M	XDREQ1	DMA request 1 output to CPU
44	O2M	XQMCDAK	DMA acknowledge output (QM-coder)	94	O2M	XGABCS	Chip select (gate array B)
45	O2M	XQMRD	Read signal to QM-coder	95	O2M	XSRAMCS	Chip select (SRAM)
46	O2M	XQMWR	Write signal to QM-coder	96	O2M	XPGMCS	Chip select (ROM)
47	O2M	XQMCS	Chip select signal to QM-coder	97	I	XMDMINT	Interrupt request signal from Modem
48	IO2M	D15	System data input/output	98	O2M	XMDMCS	Chip select (Modem)
49	IO2M	D14	System data input/output	99	O	XMDMRST	Modem reset output
50	IO2M	D13	System data input/output	100	–	VDD	Power supply

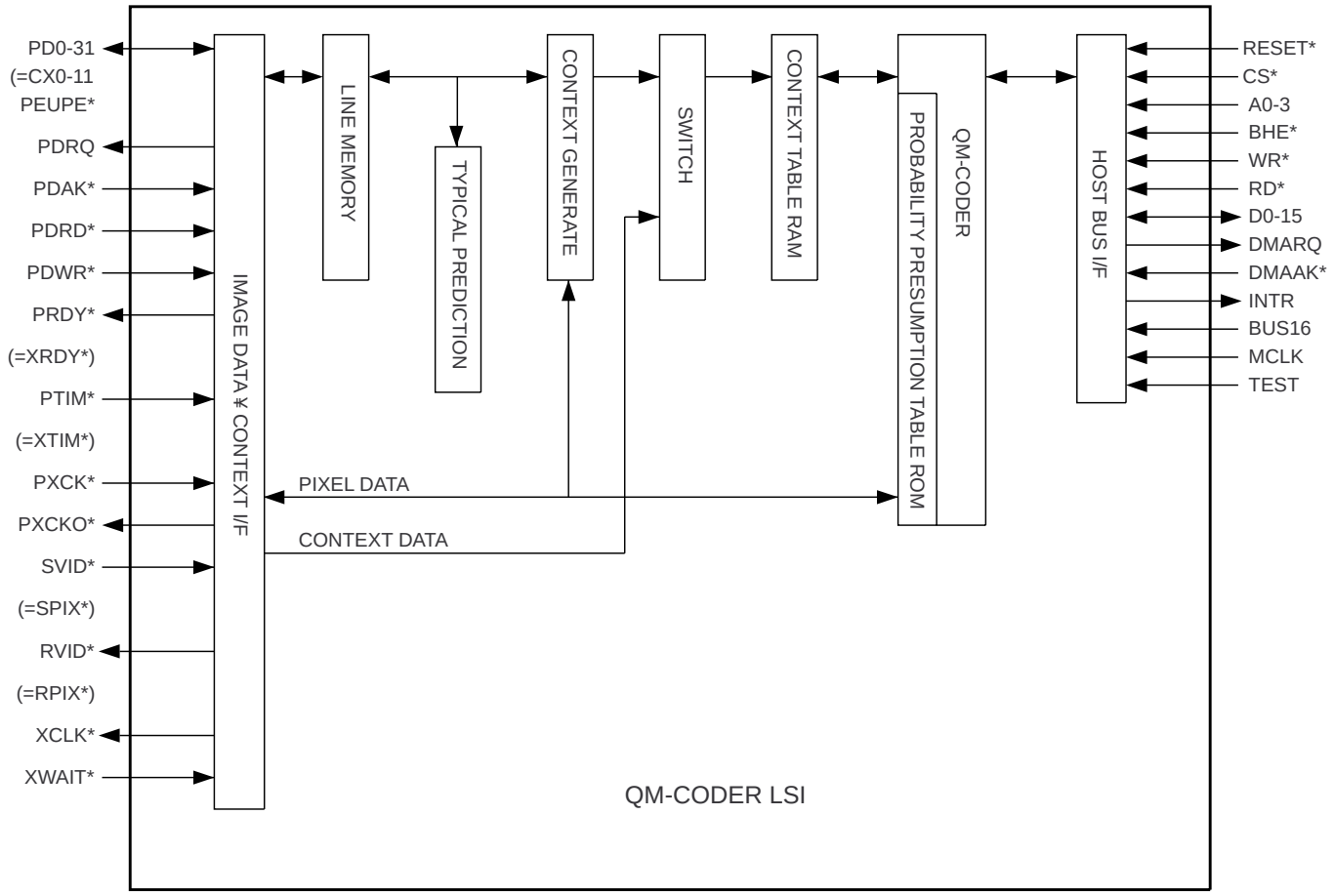
LZ9FJ59 (IC5) Terminal list

PIN	I/O	Name	Function	PIN	I/O	Name	Function
101	–	GND	Ground	131	O2M	XD6004RD	Read signal to D6004 (PC I/F)
102	O2M	XEXCS	Chip select (spare)	132	O2M	XD6004WR	Write signal to D6004 (PC I/F)
103	I	XCDCINT	Interrupt request signal from CODEC	133	O2M	D6004ALE	Address strobe signal to D6004 (PC I/F)
104	I	XCDCDRQ	DMA request signal (CODEC)	134	–	GND	Ground
105	O2M	XCDCCS	Chip select (CODEC)	135	IO	AD7	PC I/F address/data input/output
106	O	XWR	System write output	136	IO	AD6	PC I/F address/data input/output
107	O2M	FLBK4	Bank control 4	137	IO	AD5	PC I/F address/data input/output
108	O2M	FLBK3	Bank control 3	138	IO	AD4	PC I/F address/data input/output
109	O2M	FLBK2	Bank control 2	139	IO	AD3	PC I/F address/data input/output
110	O2M	FLBK1	Bank control 1	140	IO	AD2	PC I/F address/data input/output
111	IU	XFLBSY	Flash memory busy signal input	141	–	GND	Ground
112	IU	FLSZ0	Input port	142	–	VDD	Power supply
113	IU	FLSZ1	Input port	143	IS	CK16M	16MHz clock input
114	O2M	XFLSTD	Chip select (flash standard)	144	ID	TEST1	Test terminal
115	O2M	XFLOPT	Chip select (flash option)	145	IO	AD1	PC I/F address/data input/output
116	IU	XCI	Input port	146	IO	AD0	PC I/F address/data input/output
117	IU	XRHS	Input port	147	IU	XB4FRS	Input port
118	IU	XEXHS	Input port	148	IU	XFRSNS	Input port
119	TO	DPON	Output port	149	IU	XORGSNS	Input port
120	–	GND	Ground	150	IU	XROLSNS	Input port
121	TO	TXMUTE	Output port	151	I	PRTSNS1	Input port
122	IU	HSDTCT	Input port	152	TO	CDCMSK	Output port
123	TO	MPXC	Output port	153	TO	PLG0ON	Plunger 0 control
124	TO	MPXB	Output port	154	TO	PLG1ON	Plunger 1 control
125	TO	DPMUTE	Output port	155	TO	LEDON	CIS LED light source control
126	IU	PCDTCT	Input port	156	IU	XEXINT0	Interrupt request signal from PC I/F
127	TO	FAXPCSL	Output port	157	IU	XEXINT1	Interrupt request signal (spare)
128	O2M	XD9001CS	Chip select (PC I/F D9001)	158	I	PCIFSL	PC I/F select signal input
129	O2M	XD9001RW	Read signal to D9001 (PC I/F)	159	IO2M	IOP0	Input port (spare)
130	O2M	XD9001WR	Write signal to D9001 (PC I/F)	160	–	GND	Ground

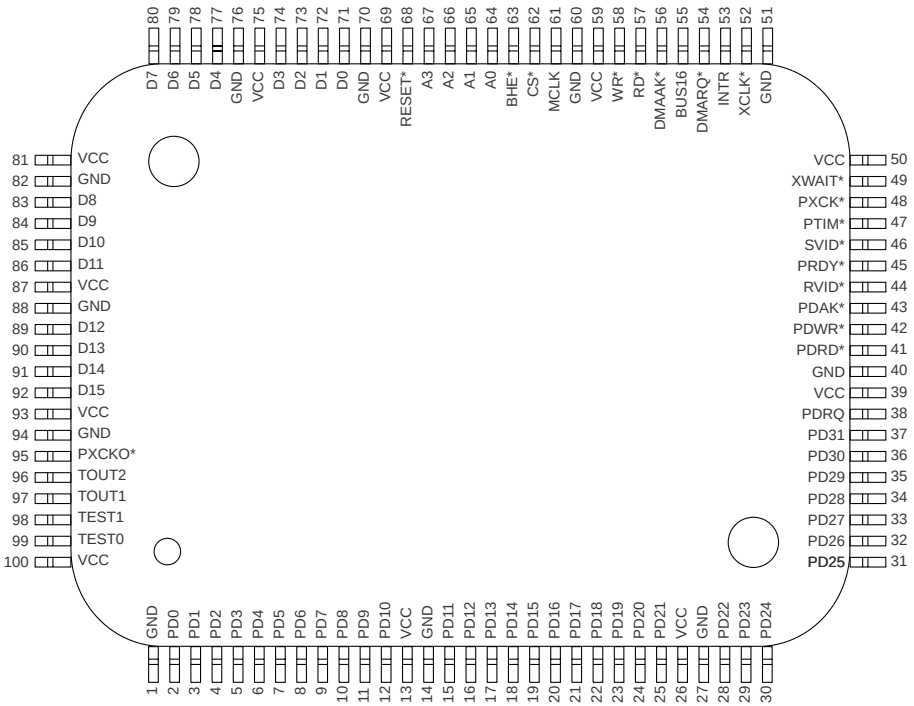
I : Input terminal (TTL level input)
IS : Input terminal (TTL level schmitt input)
IU : Input terminal (TTL level input, pull up resistor 250 KΩ building in)
ID : Input terminal (TTL level input, pull down resistor 250 KΩ building in)
IO : Input/output terminal (TTL level input, output electric current: I_{OL}=4.0 mA)
IO2M : Input/output terminal (TTL level input, output electric current : I_{OL}=2.0 mA)
O : Output terminal (Output electric current: I_{OL}=4.0 mA)
O2M : Output terminal (Output electric current: I_{OL}=2.0 mA)
TO : Try-state output terminal (Output electric current: I_{OL}=4.0 mA)
VDD : Power supply
GND : Ground

(8) JBIG Block

When it sends FAX by the JBIG compression form, the JBIG compression of the image data and JBIG expansion are done with QM-CODER LSI of IC3 (M65761FP).



IC3: VHiM65761FP-1(M65761FP)



M65761FP (IC3) Terminal descriptions

I/F	Signal name	Terminal No	I/O	Function
Host bus I/F (29 pin)	RESET*	68	I	H/W reset signal.
	CS*	62	I	Chip select signal.
	A0-3	64,65,66,67	I	Address select signal of inner register.
	BHE*	63	I	Access signal of upward byte (D8-15).
	WR*	58	I	Write strobe signal.
	RD*	57	I	Read strobe signal.
	D0-15	71~74, 77~80, 83~86, 89~92	IO	Input/output data signal. (Use D0-7 when 8 bit bus)
	DMARQ	54	O	DMA request signal of encode data.
	DMAAK*	56	I	DMA acknowledge signal of encode data.
	INTR	53	O	Interrupt request signal.
	BUS16	55	I	8 bit bus (D0-7) and 16 bit bus (D0-15) function select line.
Image data I/F Parallel	PD0-31	2~12 15~25 28~37	IO	Parallel image input/output bus. (Use PD0-15 when 16 bit bus)
	PDRQ	38	O	DMA request signal of image data.
	PDAK*	43	I	DMA acknowledge signal of image data.
	PDRD*	41	I	Read strobe signal of image data.
	PDWR*	42	I	Write strobe signal of image data.
Image data I/F Serial	PRDY*	45	O	1 line input/output start ready signal of image data.
	PTIM*	47	I	1 line transfer section signal of image data.
	PXCK*	48	I	Transfer clock signal of image data.
	PXCKO*	95	O	Transfer synchronization clock signal of image data.
	SVID*	46	I	Input signal of image data.
	RVID*	44	O	Output signal of image data.
Context I/F	CX0-11	2~12,15	I	Context input. (CX0 is possible to feed back in LSI) (=PD0-11)
	PEUPE*	19	I	Updata enable of RAM for PE. (Learning function ON/OFF) (=PD15)
	SPIX*	46	I	Encode image data input signal. (=SVID*)
	RPIX*	44	O	Decode image data output signal. (=RVID*)
	XCLK*	52	O	Context data transfer clock signal.
	XWAIT*	49	I	Context data transfer wait signal.
	XRDY*	45	O	Context data 1 stripe input/output start ready signal. (=PRDY*)
	XTIM*	47	I	Context data 1 stripe transfer section signal. (=PTIM*)
Others	MCLK	61	I	Master clock input signal.
	TEST0-1	98,99	I	Signal for test. (Usually connect to GND)
	VCC/GND	1,13,14,26,27, 39,40,50,51,59, 60,69,70,75,76, 81,82,87,88,93, 94,100	–	Power(+5V)/Ground.

Note : Most of context IF signal line is shared with image data I/F signal line.
It is shown that * of the signal name is negative logic.

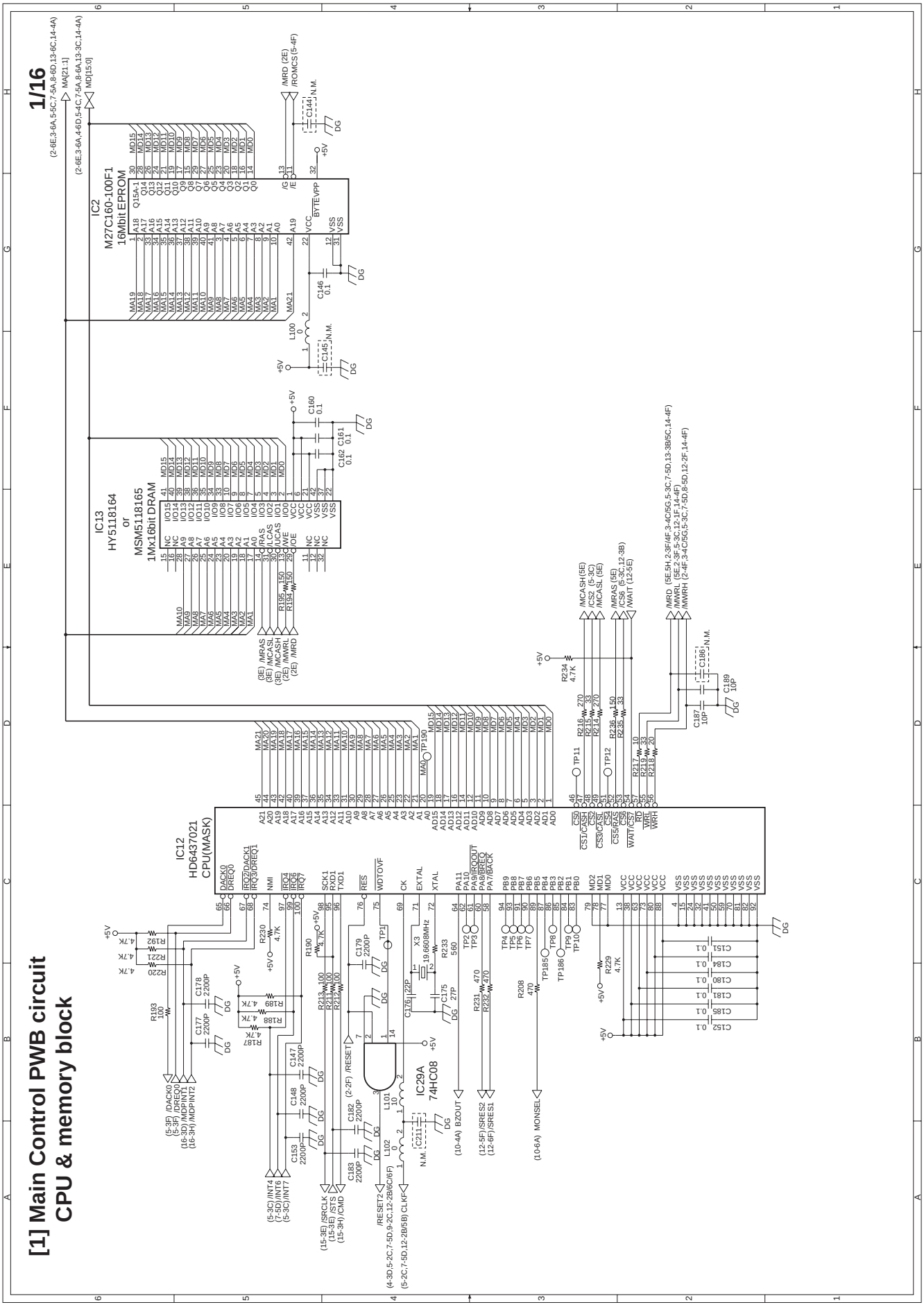
[4] Circuit description of Memory PWB

It is composed by the Flash Memory of 4Mbyte, and attached to the CNOP connecter of the Control PWB circuit. It can be expanded by substituting FO-4ML, 8ML or 12ML(OPTION) for the standard Memory PWB to 8MB, 12MB or 16MB.

1) LH28F016SUT(IC5) ... pin-56, TSOP (16 Mbit Flash Memory)

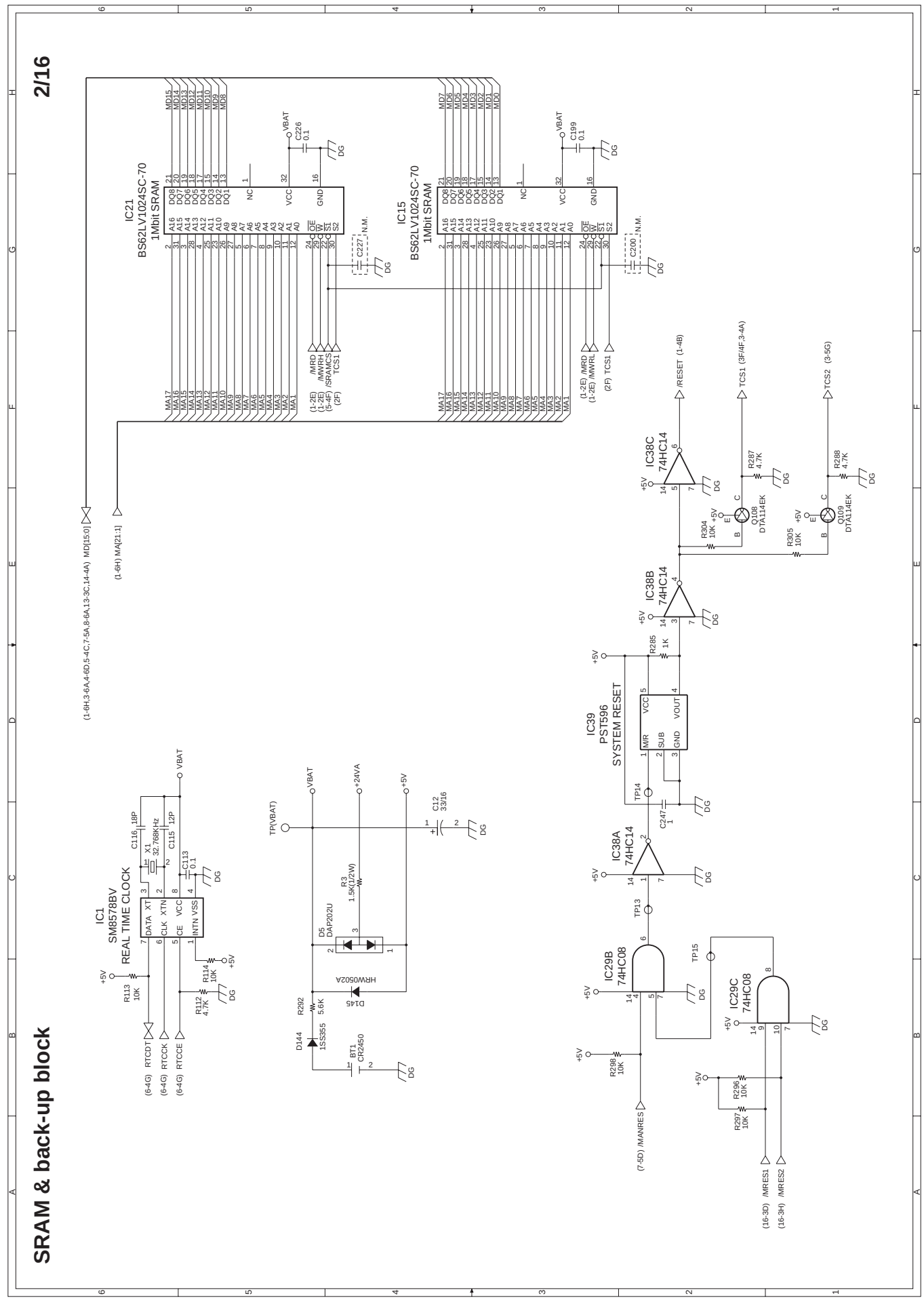
This memory is a nonvolatile type whose content does not volatilize even if power is turned off, and stores the copied, sent and received image data. Moreover, the initially registered data, registered content of “RELAY” key and registered content of “CONF” key are stored.

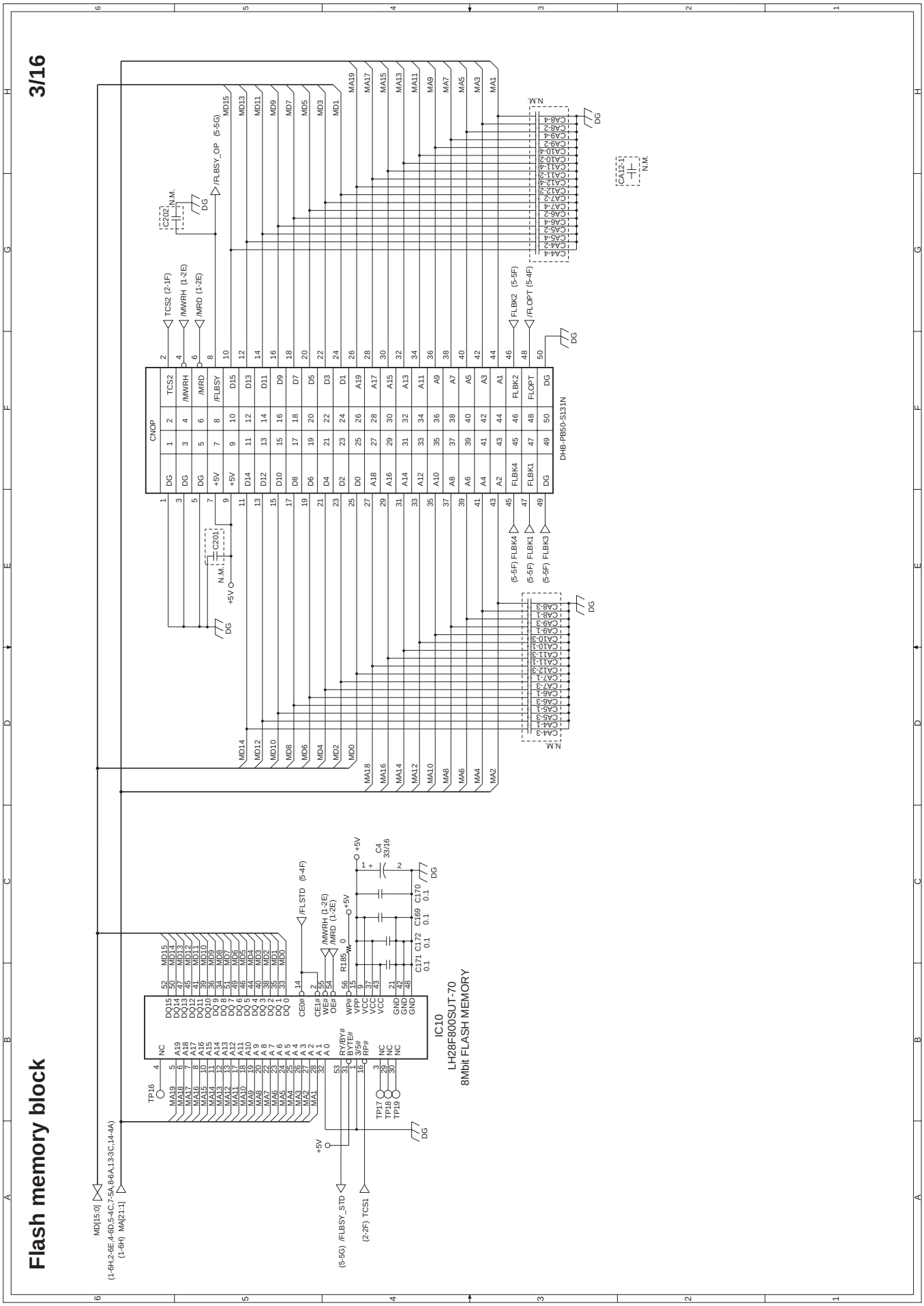
CHAPTER 6. CIRCUIT SCHEMATICS AND PARTS LAYOUT



SRAM & back-up block

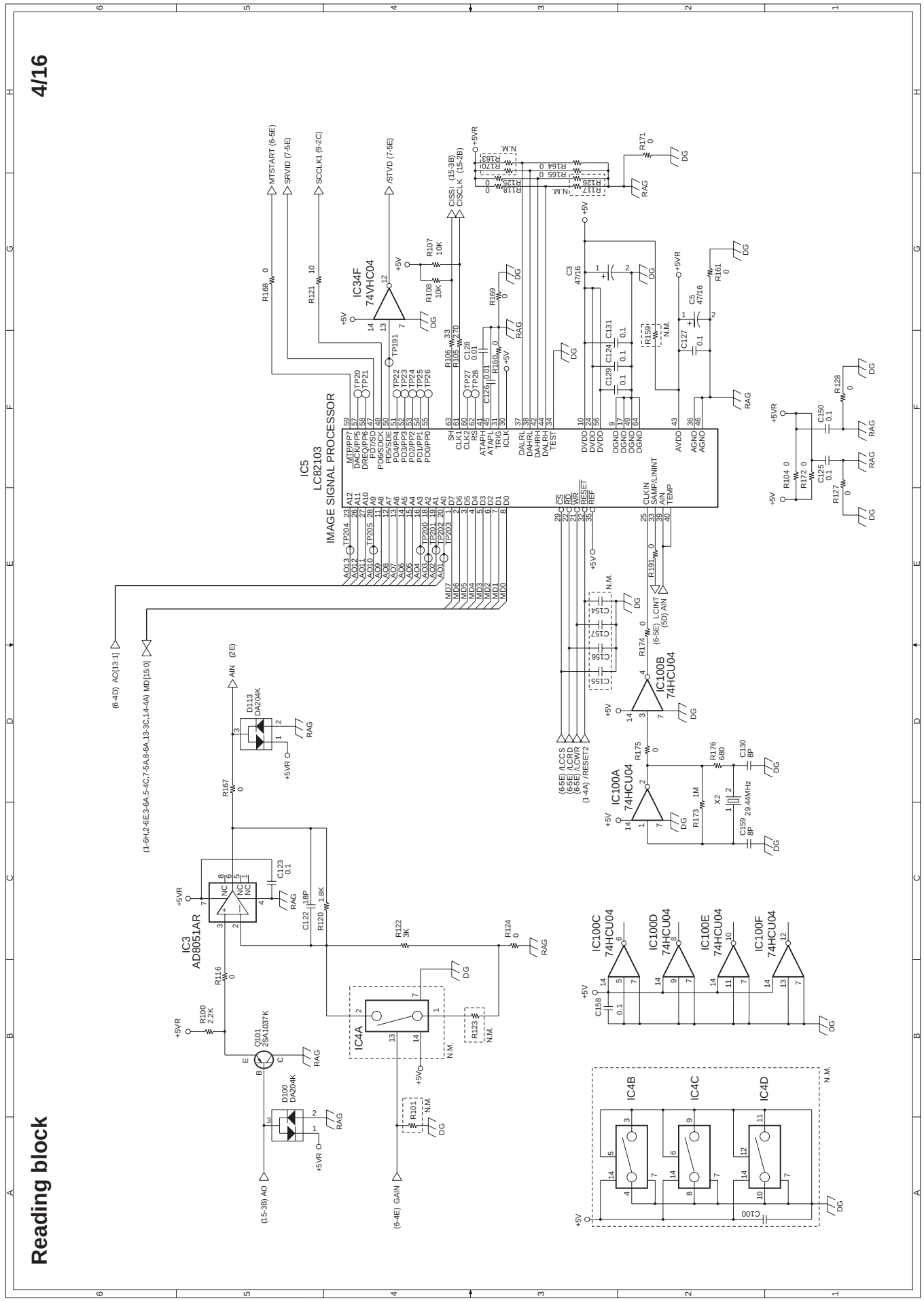
2/16




3/16
Flash memory block
IC10
LH28F800SUT-70
8Mbit FLASH MEMORY
DHB-PB50-S131N
MD[15:0]
MA[21:1]
(1-6H,2-8E,4-6D,5-4C,7-5A,8-6A,13-3C,14-4A)
(1-6H)
(5-5G) /FLBSY_STD
(2-2F) TCS1
TCS2 (2-1F)
/MWRH (1-2E)
/MRD (1-2E)
/FLBSY_OP (5-5G)
/FLSTD (5-4F)
FLBK2 (5-5F)
/FLOPT (5-4F)
(5-5F) FLBK4
(5-5F) FLBK1
(5-5F) FLBK3
N.M.
DG
+5V

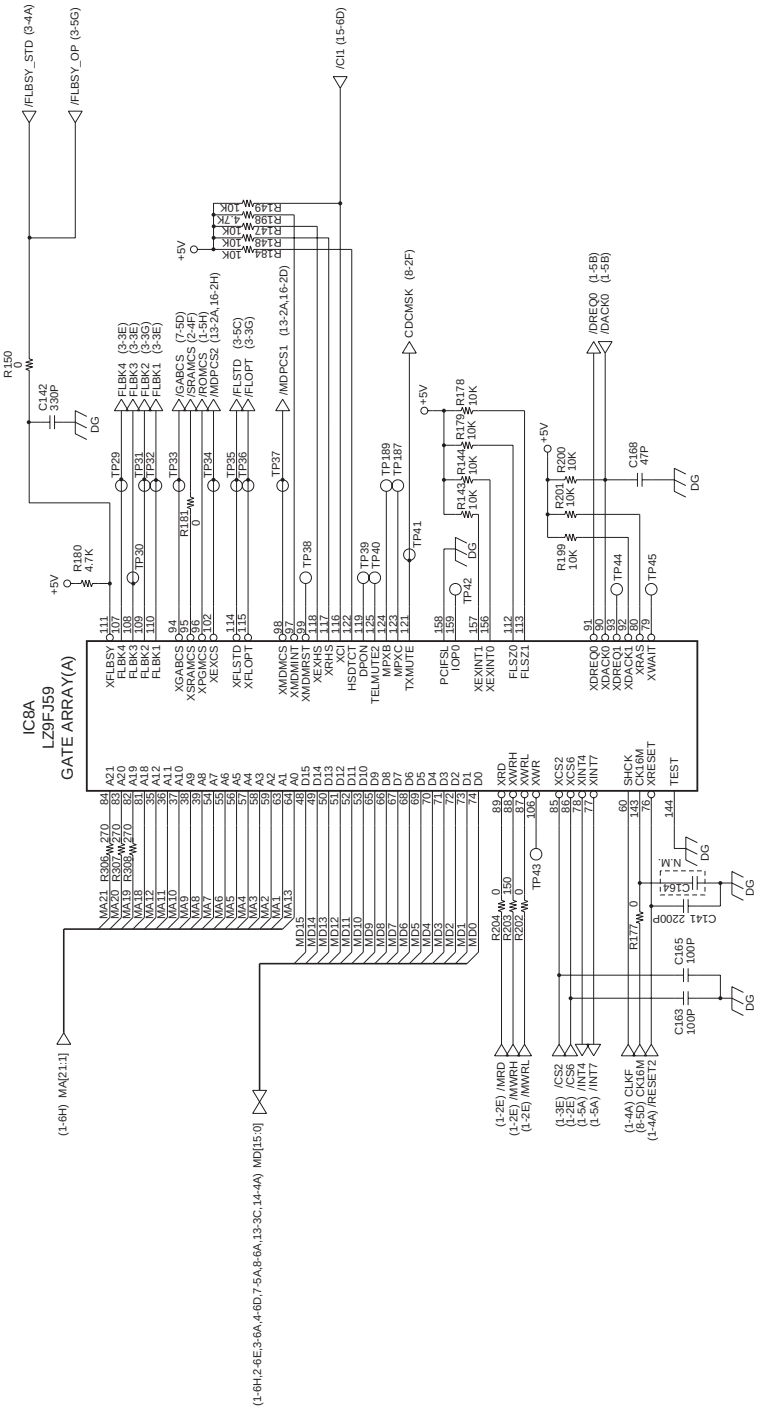
Reading block

4/16



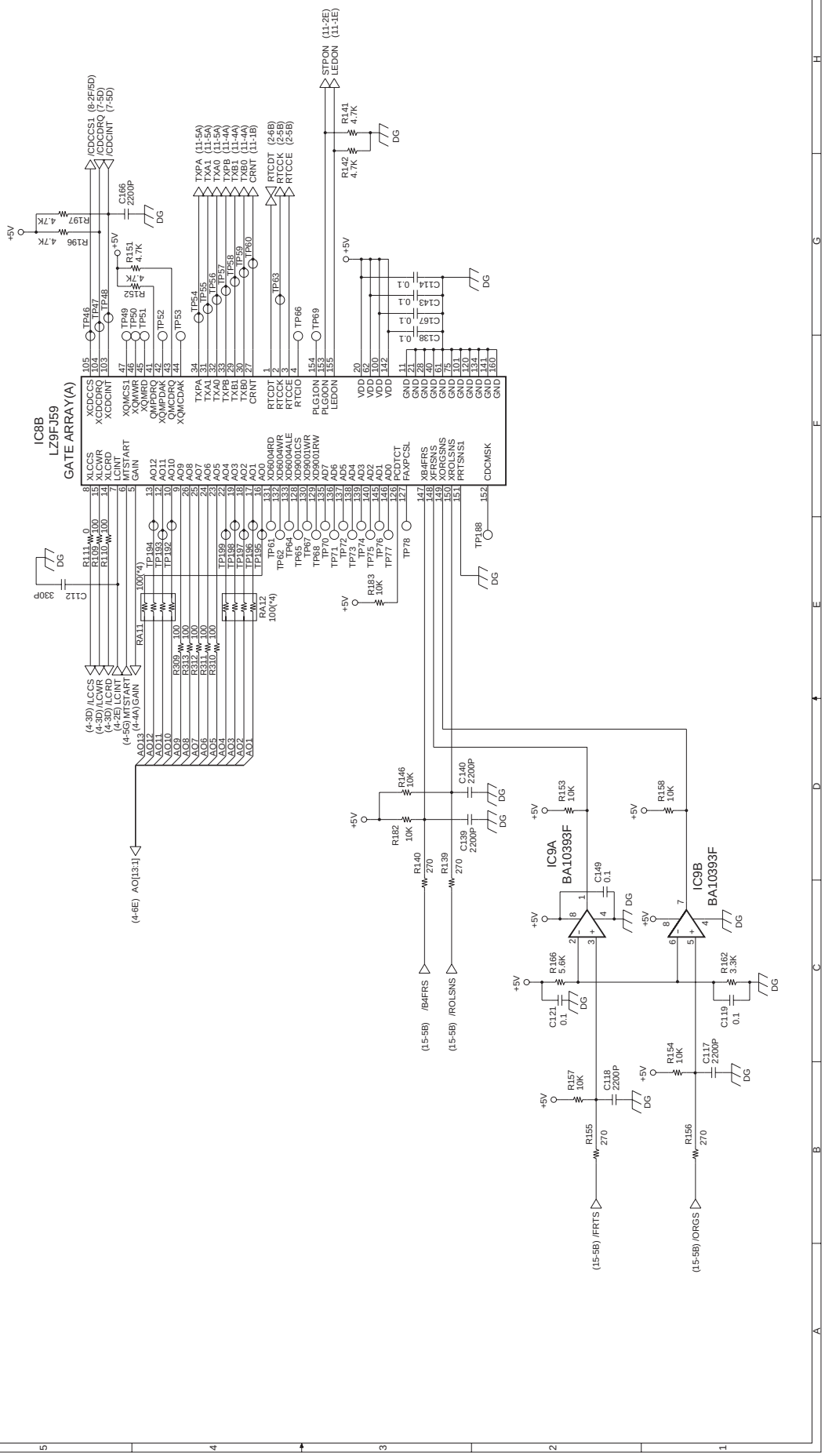
Gate array (A) block 1

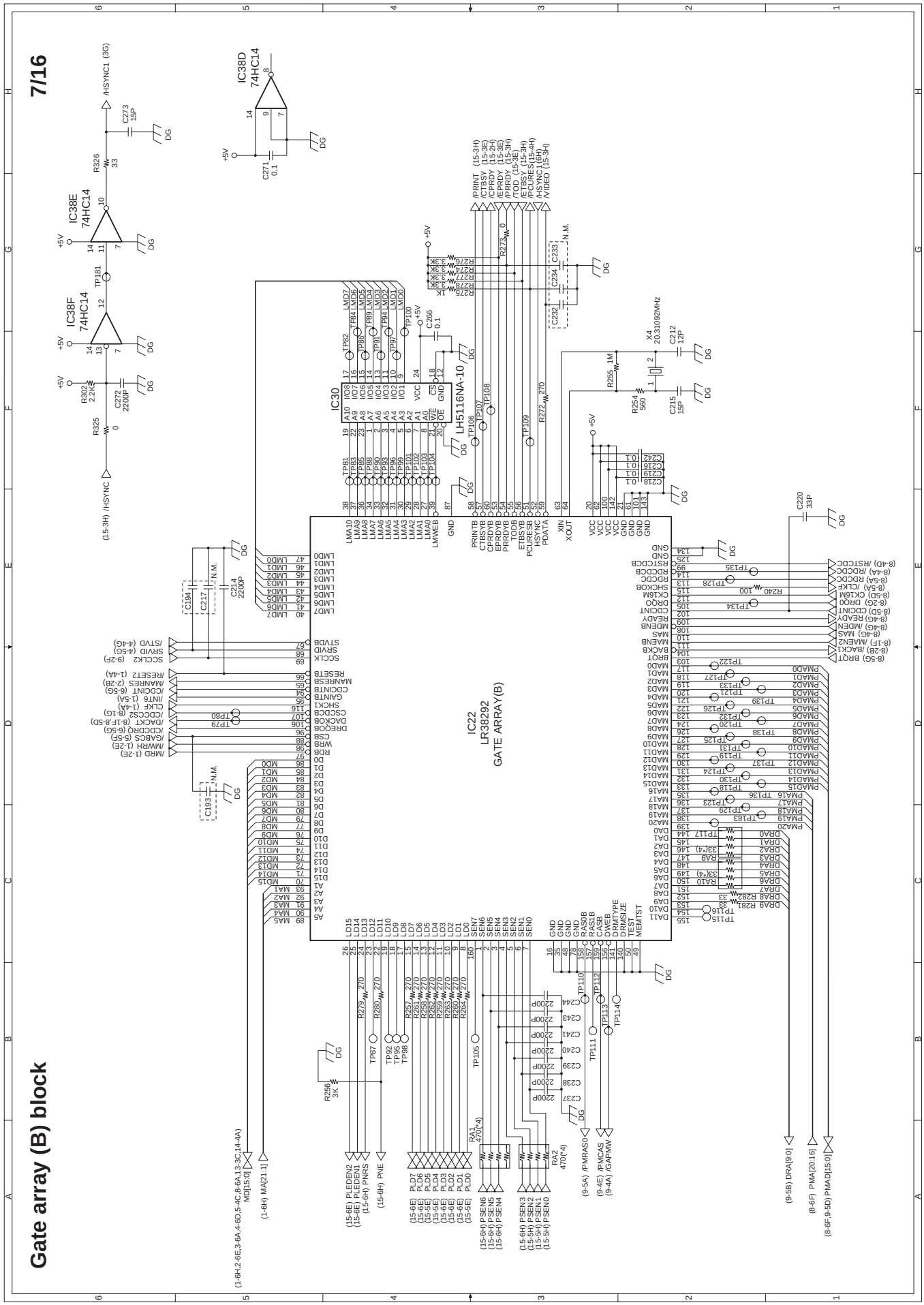
5/16



Gate array (A) block 2

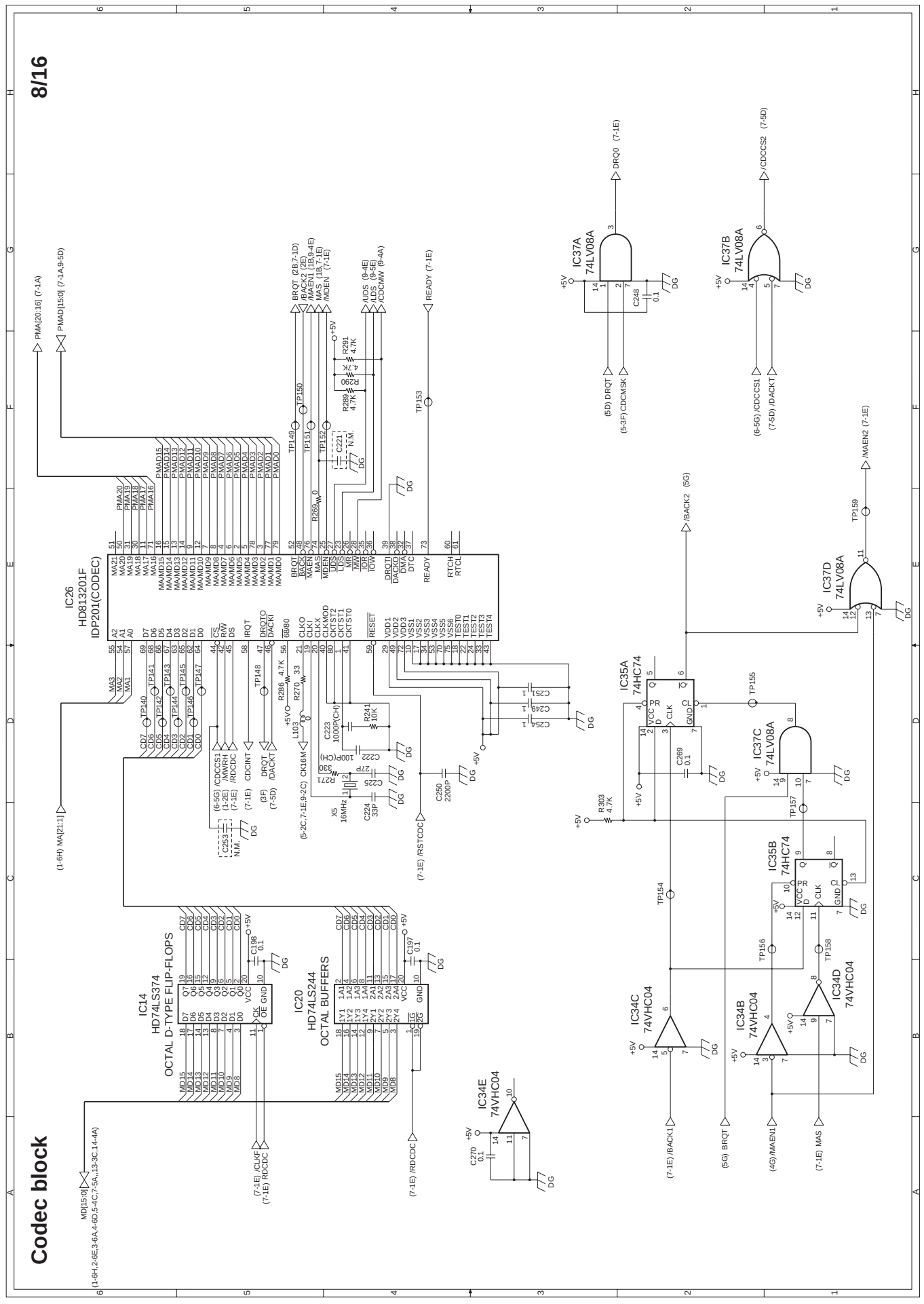
6/16




7/16
Gate array (B) block
IC22
LR38292
GATE ARRAY(B)
IC30
LH5116NA-10
IC38D
74HC14
IC38E
74HC14
IC38F
74HC14
X4
20.31092MHz
(15-3H) /HSYNC
/HSYNC1 (3G)
(1-6H) MA[21:1]
(1-6H,2-6E,3-6A,4-6D,5-4C,8-6A,13-3C,14-4A) MD[15:0]
(9-5B) DRA[9:0]
(8-6F) PMA[20:16]
(8-6F,9-5D) PMAD[15:0]

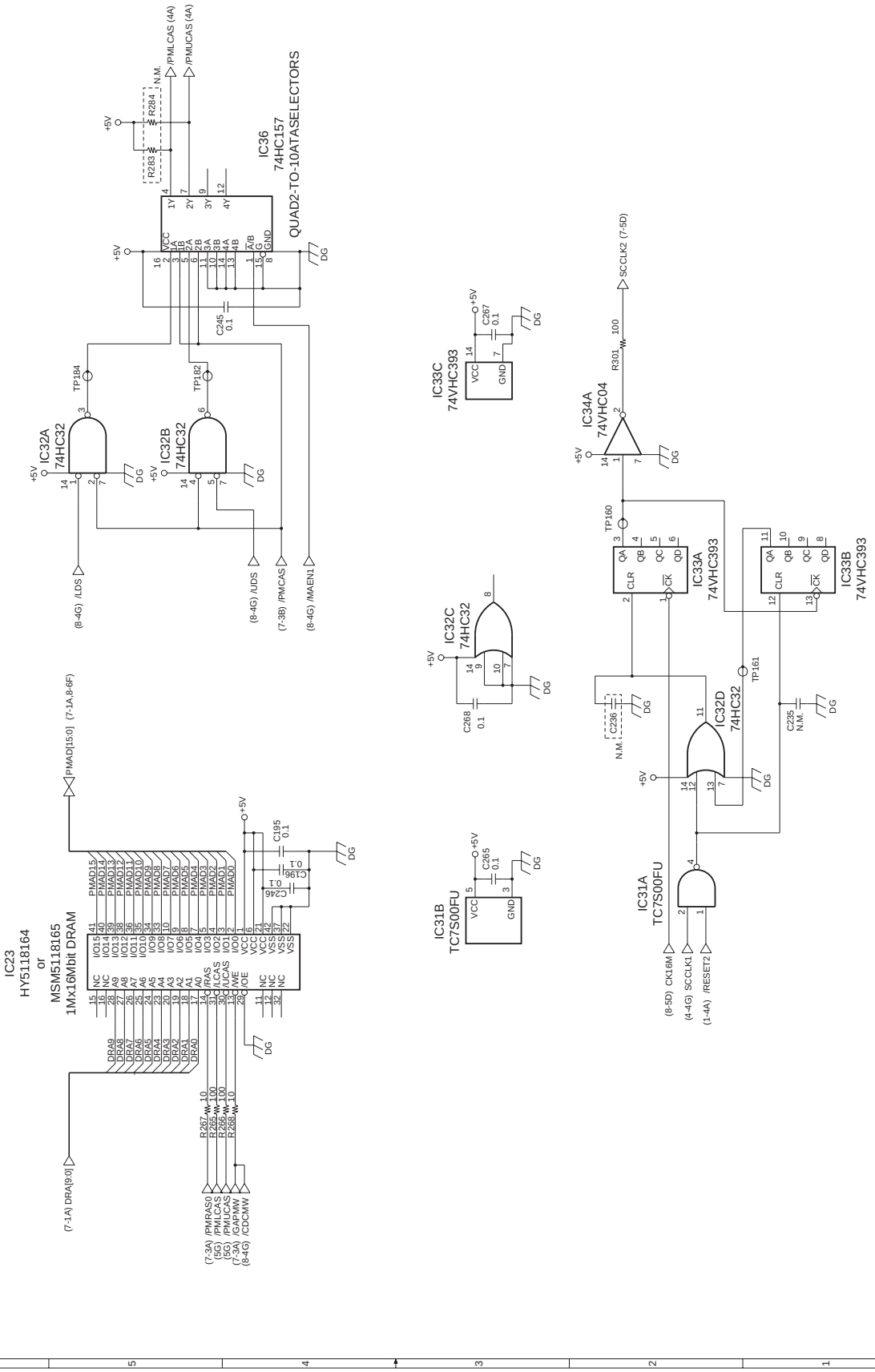
Codec block

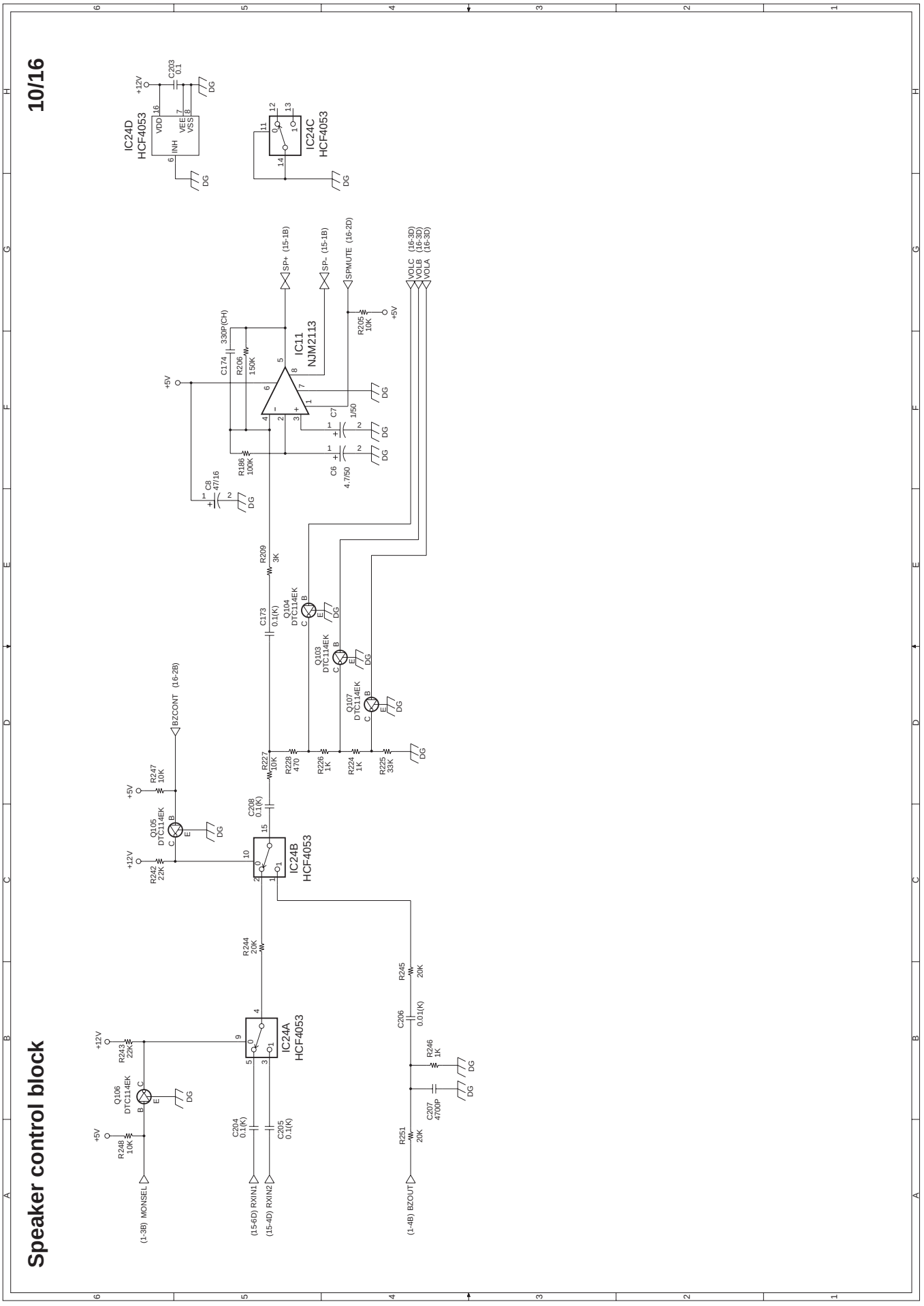
8/16



Page memory block

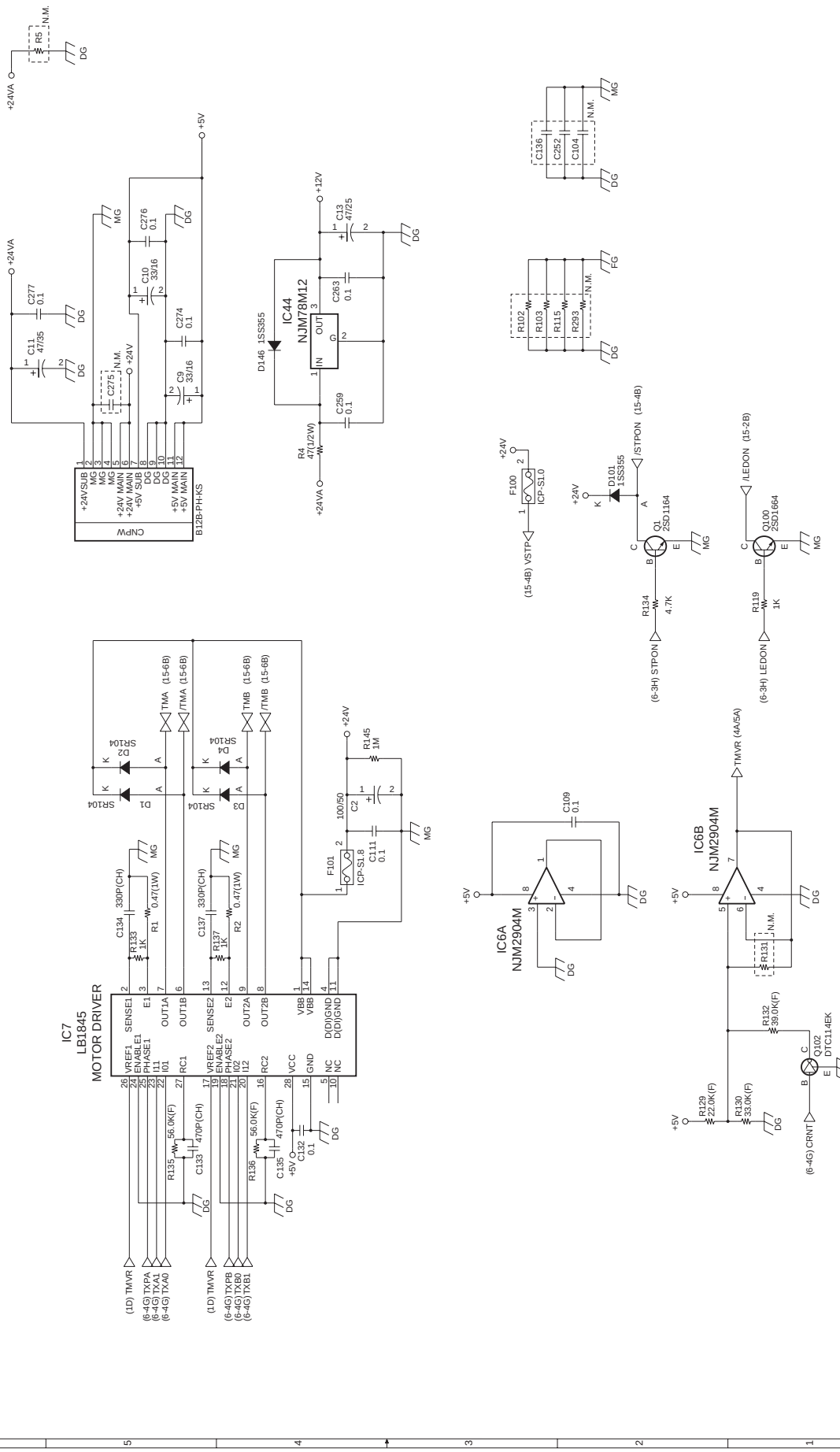
9/16

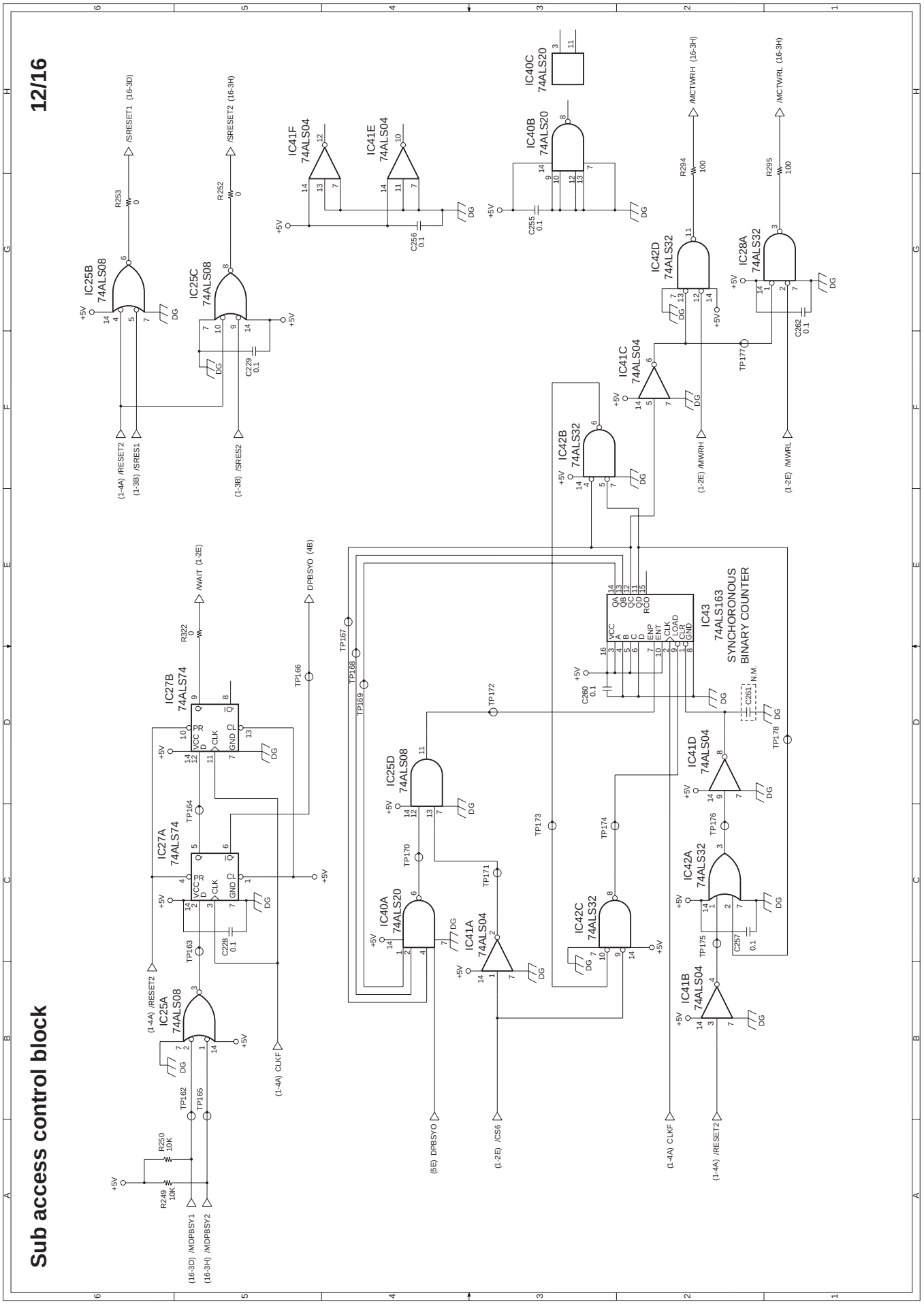


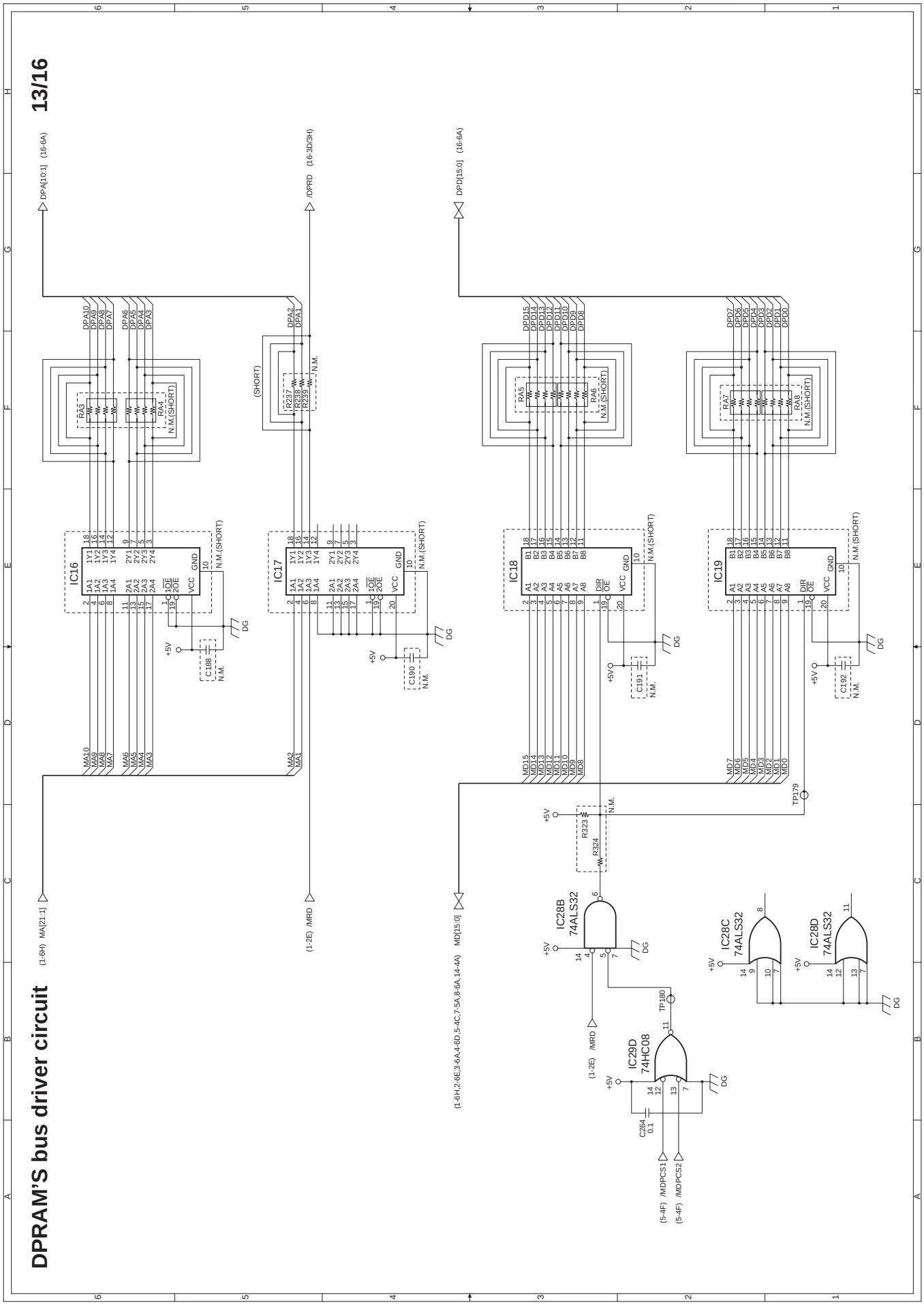

10/16
Speaker control block
IC24D HCF4053
IC24C HCF4053
IC24B HCF4053
IC24A HCF4053
IC11 NJM2113
C203 0.1
C174 330P(CH)
R206 150K
C7 1/50
C6 4.7/50
C8 47/16
R186 100K
R205 10K
R209 3K
C173 0.1(K)
R227 10K
R228 470
R226 1K
R224 1K
R225 33K
R247 10K
R242 22K
C208 0.1(K)
R244 20K
R245 20K
C206 0.01(K)
R246 1K
C207 4700P
R251 20K
R243 22K
R248 10K
C204 0.1(K)
C205 0.1(K)
Q104 DTC114EK
Q103 DTC114EK
Q107 DTC114EK
Q105 DTC114EK
Q106 DTC114EK
+12V
+5V
DG
SP+ (15-1B)
SP- (15-1B)
SPMUTE (16-2D)
VOLC (16-3D)
VOLB (16-3D)
VOLA (16-3D)
BZCONT (16-2B)
(1-3B) MONSEL
(15-6D) RXIN1
(15-4D) RXIN2
(1-4B) BZOUT

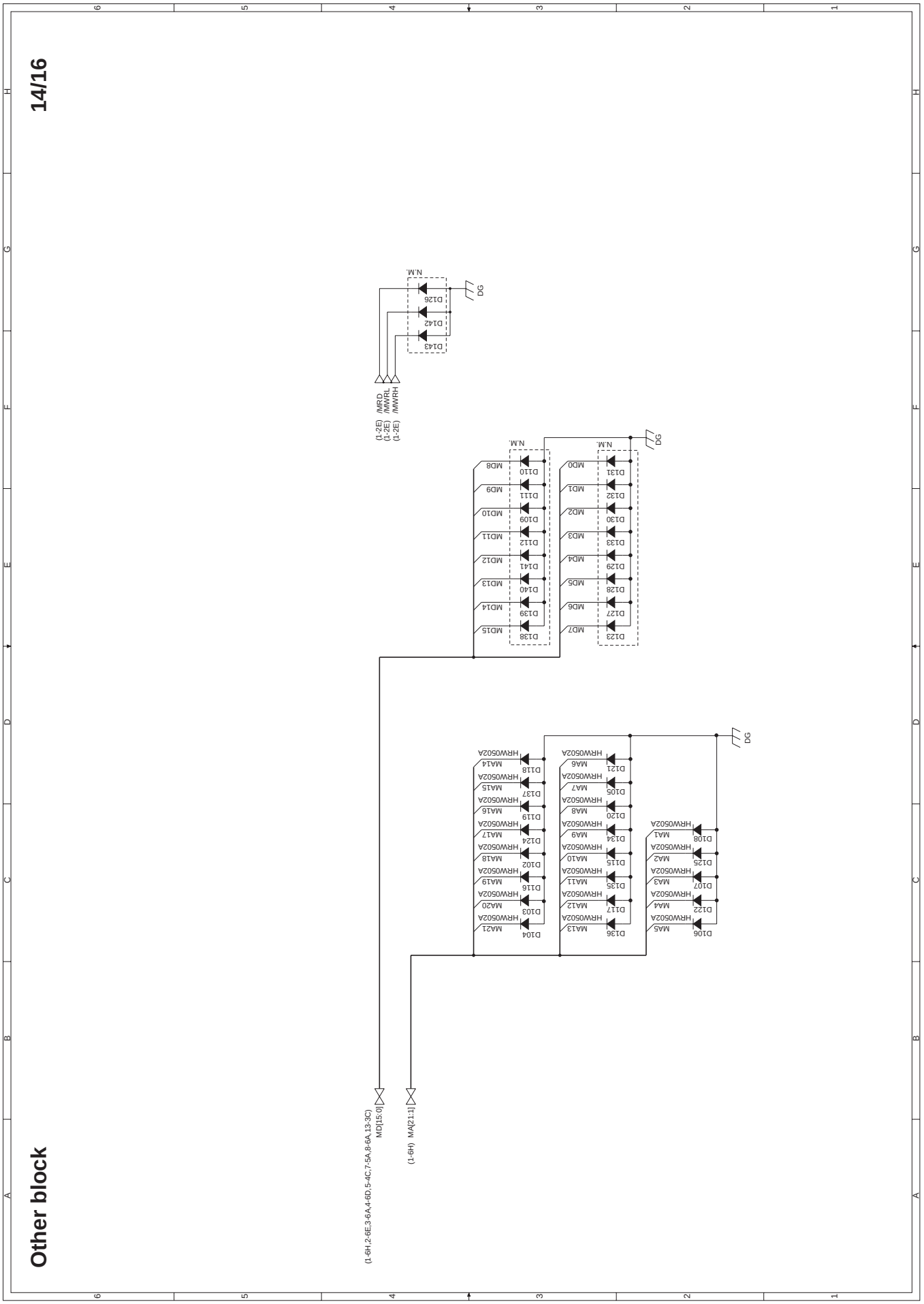
Driver & power supply block

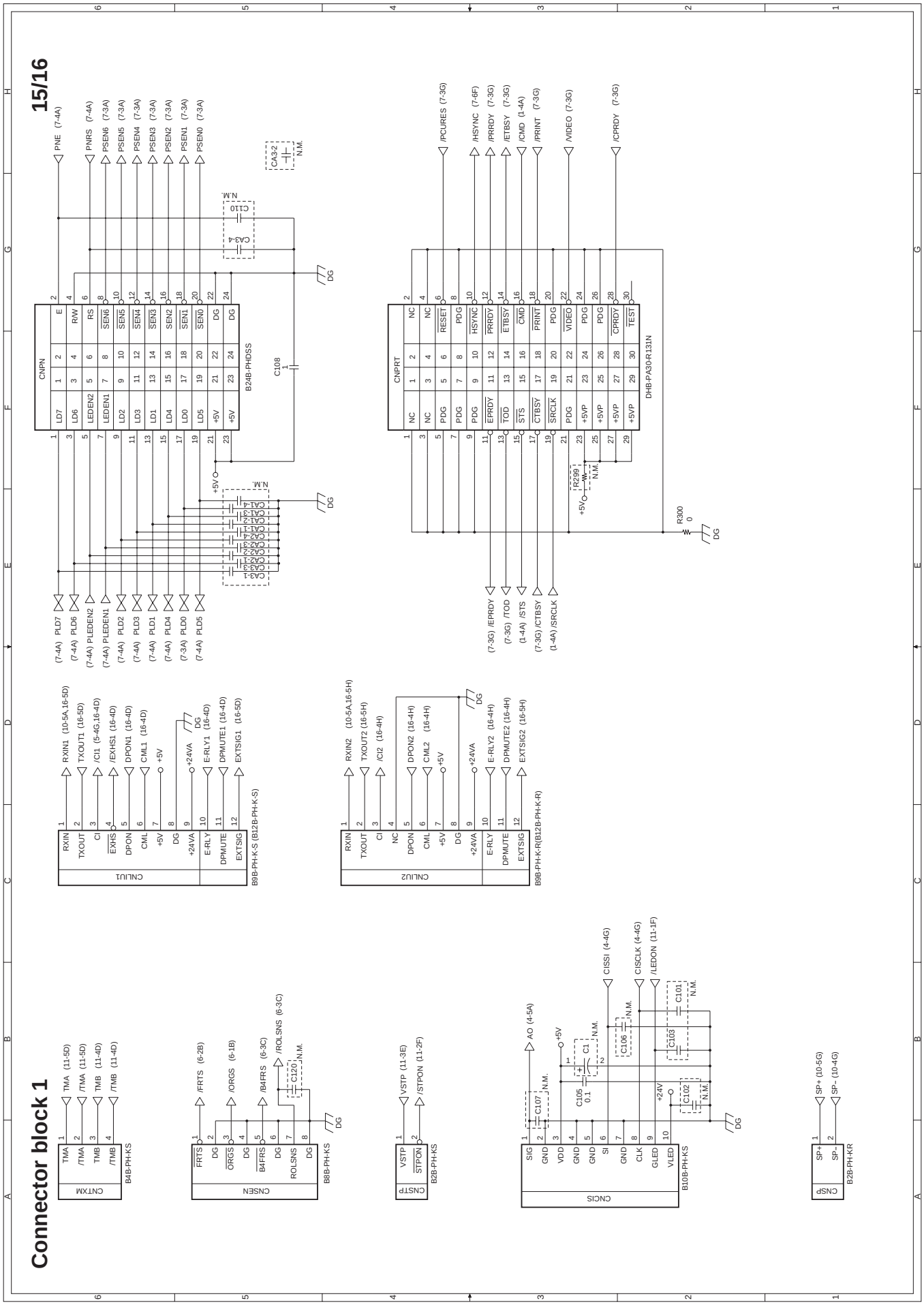
11/16




12/16
Sub access control block
IC25B 74ALS08
IC25C 74ALS08
IC41F 74ALS04
IC41E 74ALS04
IC40C 74ALS20
IC40B 74ALS20
IC42D 74ALS32
IC28A 74ALS32
IC41C 74ALS04
IC42B 74ALS32
IC27B 74ALS74
IC27A 74ALS74
IC25A 74ALS08
IC25D 74ALS08
IC40A 74ALS20
IC41A 74ALS04
IC42C 74ALS32
IC41D 74ALS04
IC42A 74ALS32
IC41B 74ALS04
IC43 74ALS163 SYNCHRONOUS BINARY COUNTER
/SRESET1 (16-3D)
/SRESET2 (16-3H)
/MCTWRH (16-3H)
/MCTWRL (16-3H)
(1-4A) /RESET2
(1-3B) /SRES1
(1-3B) /SRES2
(1-2E) /MWRH
(1-2E) /MWRL
/WAIT (1-2E)
DPBSYO (4B)
(1-4A) CLKF
(16-3D) /MDPBSY1
(16-3H) /MDPBSY2
(5E) DPBSYO
(1-2E) /CS6
(1-4A) CLKF
(1-4A) /RESET2

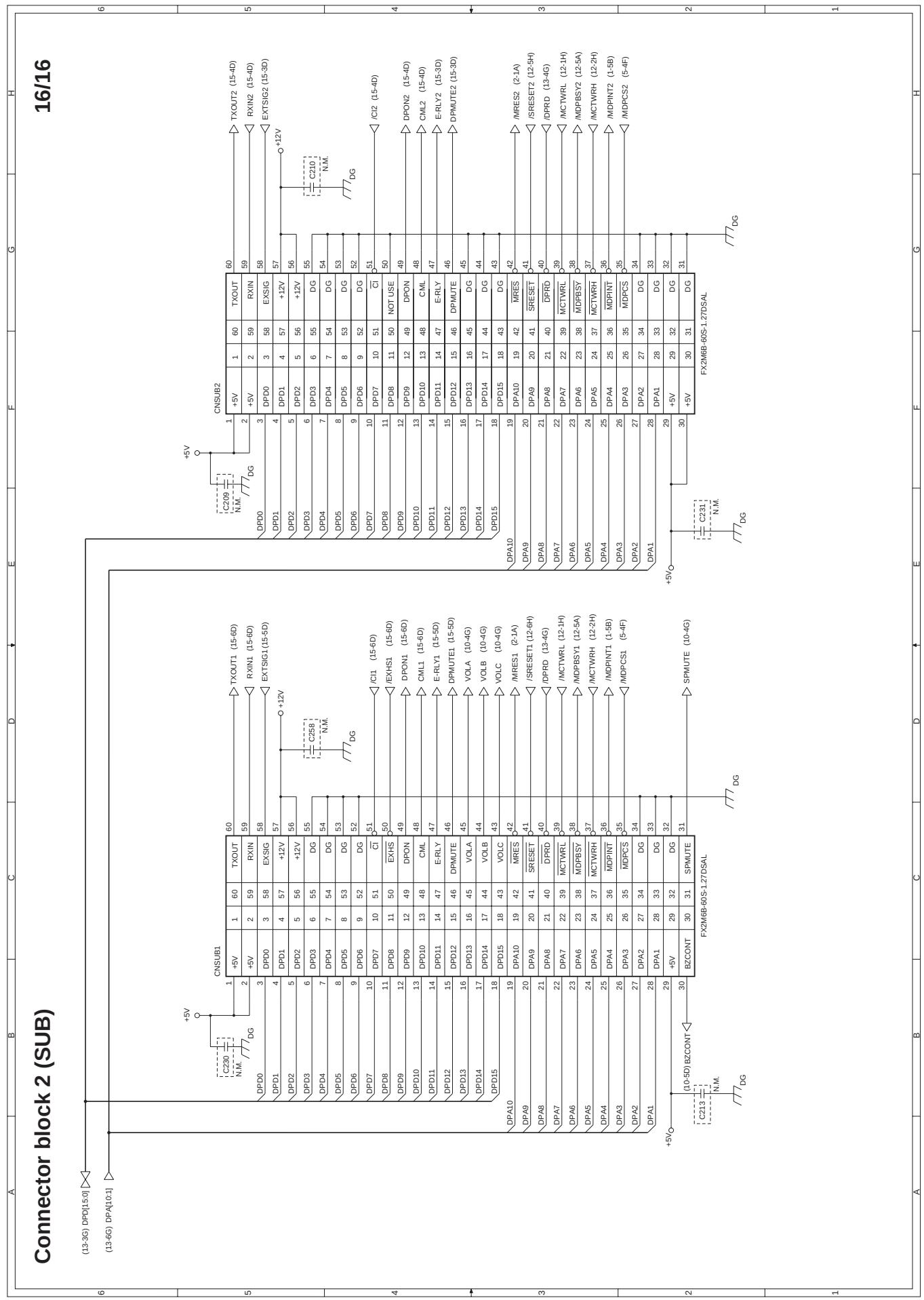

13/16
DPRAM'S bus driver circuit
DPA[10:1] (16-6A)
/DPRD (16-3D/3H)
DPD[15:0] (16-6A)
MA[21:1] (1-6H)
(1-2E) /MRD
MD[15:0] (1-6H,2-6E,3-6A,4-6D,5-4C,7-5A,8-6A,14-4A)
(5-4F) /MDPCS1
(5-4F) /MDPCS2
IC16
IC17
IC18
IC19
IC28B 74ALS32
IC28C 74ALS32
IC28D 74ALS32
IC29D 74HC08
RA3
RA4
RA5
RA6
RA7
RA8
R237
R238
R239
R323
R324
C188
C190
C191
C192
C264 0.1
TP179
TP180
+5V
DG
N.M.
N.M.(SHORT)
(SHORT)


14/16
Other block
(1-6H,2-6E,3-6A,4-6D,5-4C,7-5A,8-6A,13-3C) MD[15:0]
(1-6H) MA[21:1]
(1-2E) /MRD
(1-2E) /MWRL
(1-2E) /MWRH
N.M.
D126
D142
D143
DG
N.M.
D110
D111
D109
D112
D141
D140
D139
D138
MD8
MD9
MD10
MD11
MD12
MD13
MD14
MD15
N.M.
D131
D132
D130
D133
D129
D128
D127
D123
MD0
MD1
MD2
MD3
MD4
MD5
MD6
MD7
DG
HRW0502A
D118
D137
D119
D124
D102
D116
D103
D104
MA14
MA15
MA16
MA17
MA18
MA19
MA20
MA21
HRW0502A
D121
D105
D120
D134
D115
D135
D117
D136
MA6
MA7
MA8
MA9
MA10
MA11
MA12
MA13
HRW0502A
D108
D125
D107
D122
D106
MA1
MA2
MA3
MA4
MA5
DG

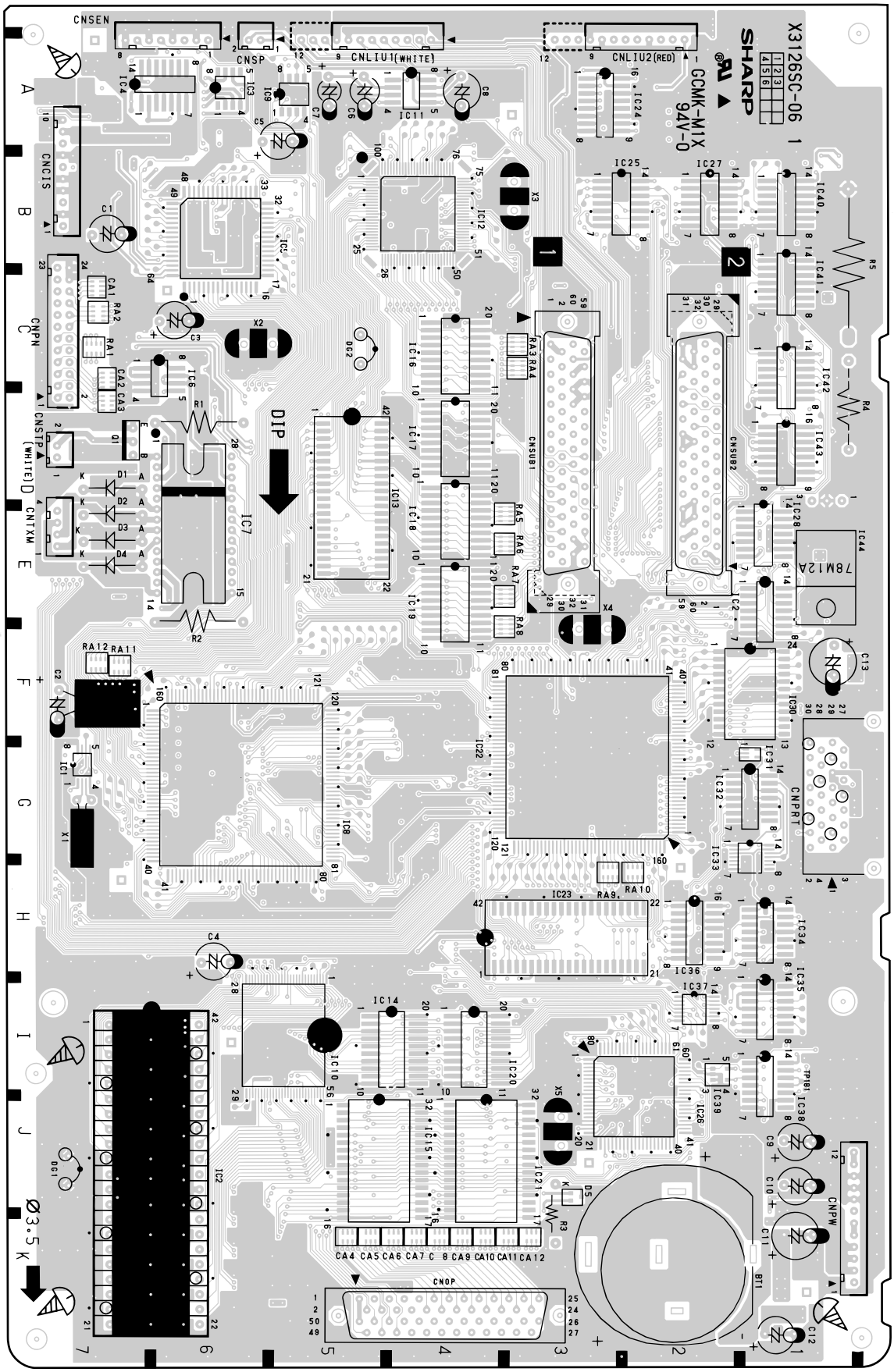

15/16
Connector block 1
CNPN
B24B-PHDSS
CNPRT
DHB-PA30-R131N
CNLIU1
B9B-PH-K-S (B12B-PH-K-S)
CNLIU2
B9B-PH-K-R(B12B-PH-K-R)
CNTXM
B4B-PH-KS
CNSEN
B8B-PH-KS
CNSTP
B2B-PH-KS
CNCIS
B10B-PH-KS
CNSP
B2B-PH-KR
PNE (7-4A)
PNRS (7-4A)
PSEN6 (7-3A)
PSEN5 (7-3A)
PSEN4 (7-3A)
PSEN3 (7-3A)
PSEN2 (7-3A)
PSEN1 (7-3A)
PSEN0 (7-3A)
/PCURES (7-3G)
/HSYNC (7-6F)
/PRRDY (7-3G)
/ETBSY (7-3G)
/CMD (1-4A)
/PRINT (7-3G)
/VIDEO (7-3G)
/CPRDY (7-3G)
RXIN1 (10-5A,16-5D)
TXOUT1 (16-5D)
/CI1 (5-4G,16-4D)
/EXHS1 (16-4D)
DPON1 (16-4D)
CML1 (16-4D)
E-RLY1 (16-4D)
DPMUTE1 (16-4D)
EXTSIG1 (16-5D)
RXIN2 (10-5A,16-5H)
TXOUT2 (16-5H)
/CI2 (16-4H)
DPON2 (16-4H)
CML2 (16-4H)
E-RLY2 (16-4H)
DPMUTE2 (16-4H)
EXTSIG2 (16-5H)
TMA (11-5D)
/TMA (11-5D)
TMB (11-4D)
/TMB (11-4D)
/FRTS (6-2B)
/ORGS (6-1B)
/B4FRS (6-3C)
/ROLSNS (6-3C)
VSTP (11-3E)
/STPON (11-2F)
AO (4-5A)
CISSI (4-4G)
CISCLK (4-4G)
/LEDON (11-1F)
SP+ (10-5G)
SP- (10-4G)
(7-4A) PLD7
(7-4A) PLD6
(7-4A) PLEDEN2
(7-4A) PLEDEN1
(7-4A) PLD2
(7-4A) PLD3
(7-4A) PLD1
(7-4A) PLD4
(7-3A) PLD0
(7-4A) PLD5
(7-3G) /EPRDY
(7-3G) /TOD
(1-4A) /STS
(7-3G) /CTBSY
(1-4A) /SRCLK
C108 1
C110
CA3-2
CA3-4
CA1-1
CA1-2
CA1-3
CA1-4
CA2-1
CA2-2
CA2-3
CA2-4
CA3-1
CA3-2
CA3-3
CA3-4
R299 0
R300 0
C107
C105 0.1
C1
C106
C103
C101
C102
N.M.
+5V
+24V
DG

Connector block 2 (SUB)

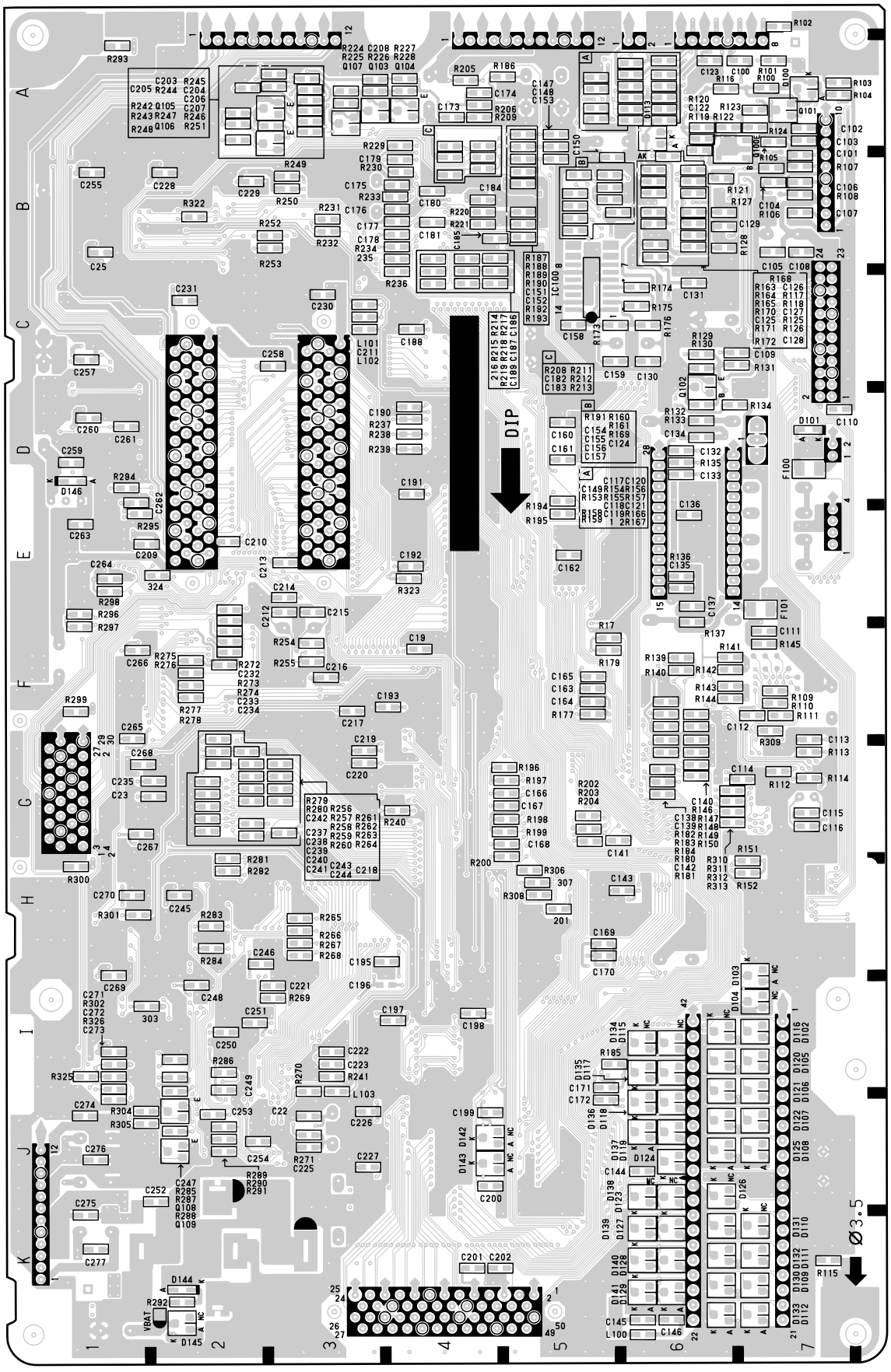
16/16



Main Control PWB parts layout (Top side)

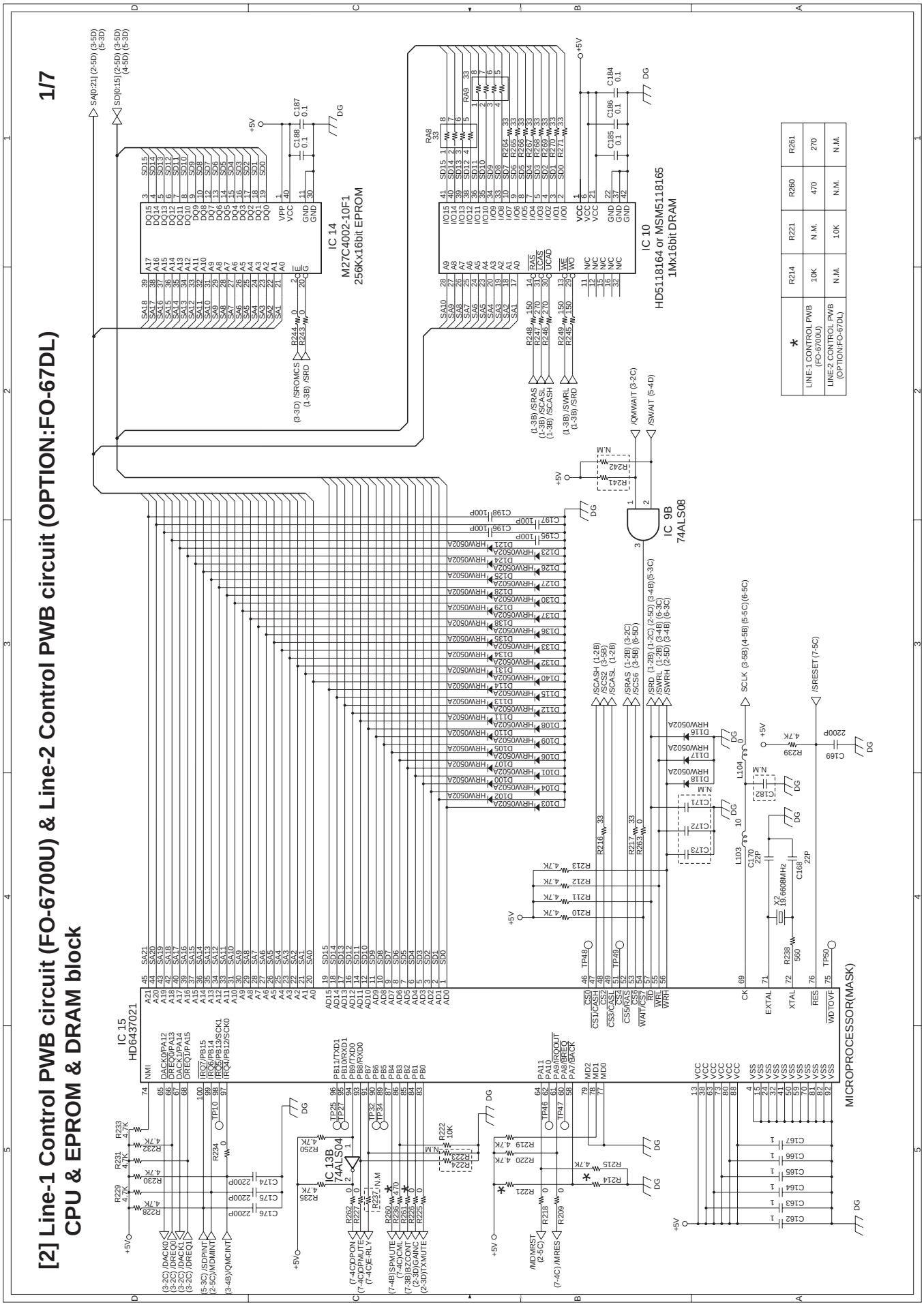


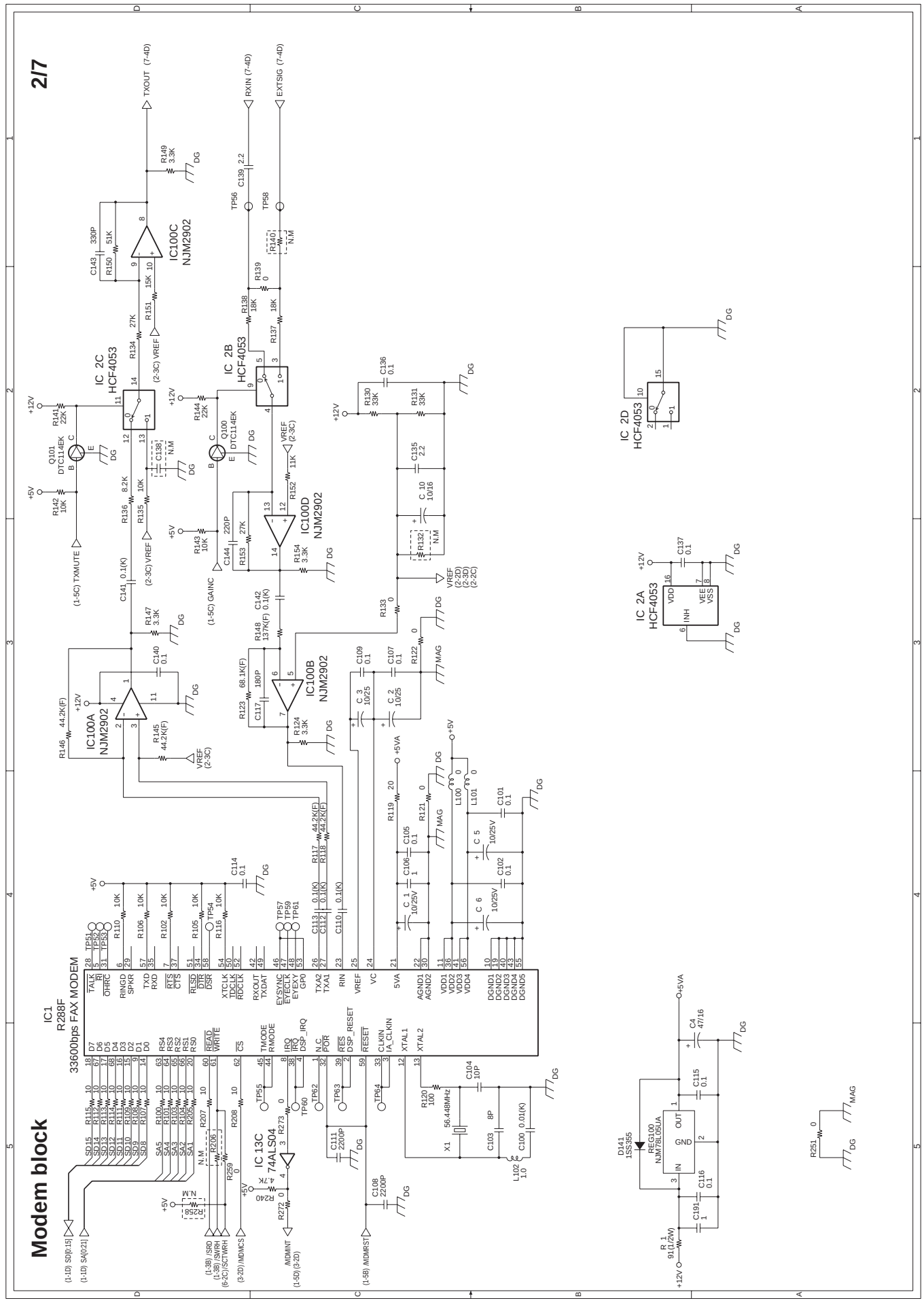
Main Control PWB parts layout (Bottom side)

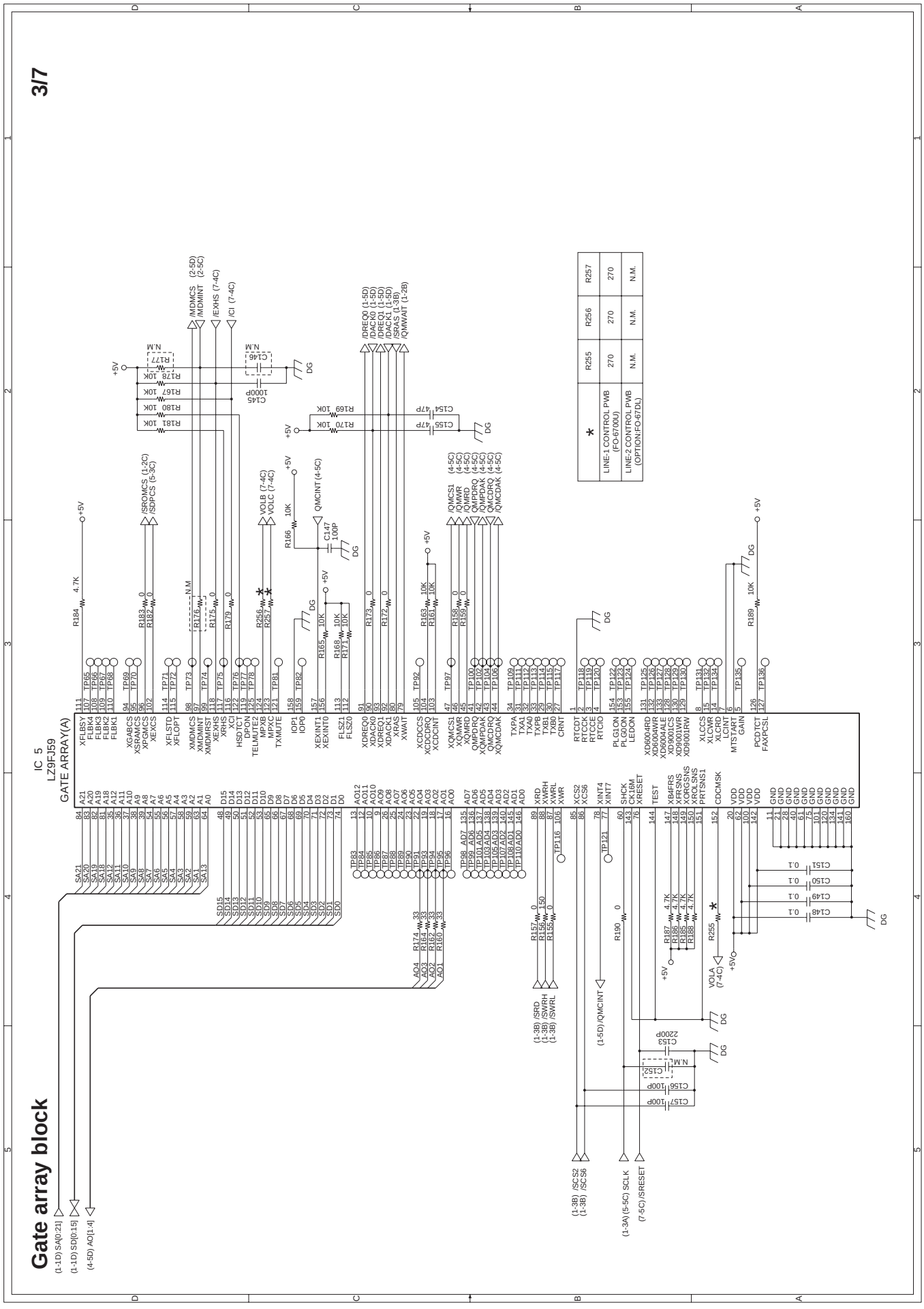


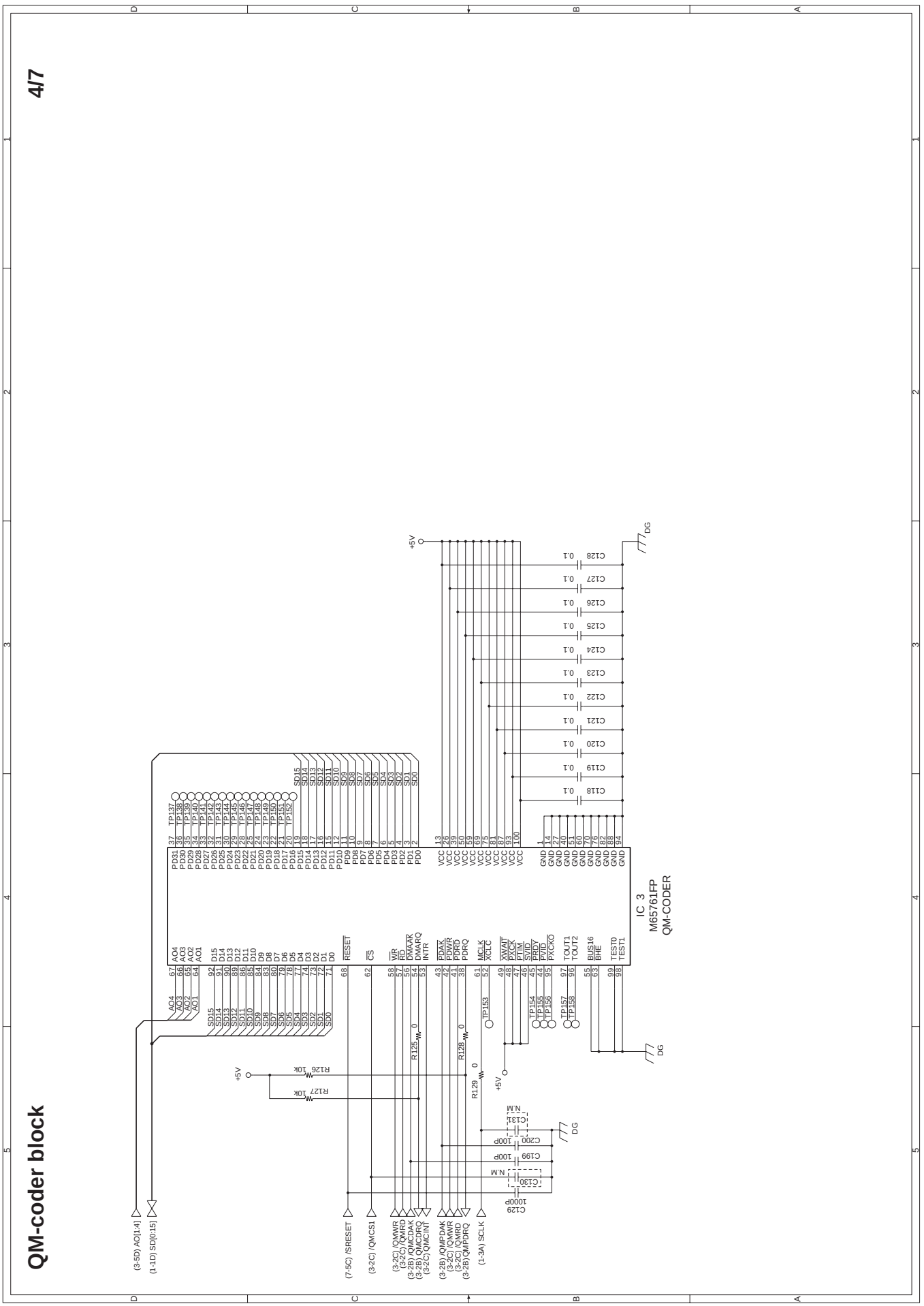
[2] Line-1 Control PWB circuit (FO-6700U) & Line-2 Control PWB circuit (OPTION:FO-67DL)
CPU & EPROM & DRAM block

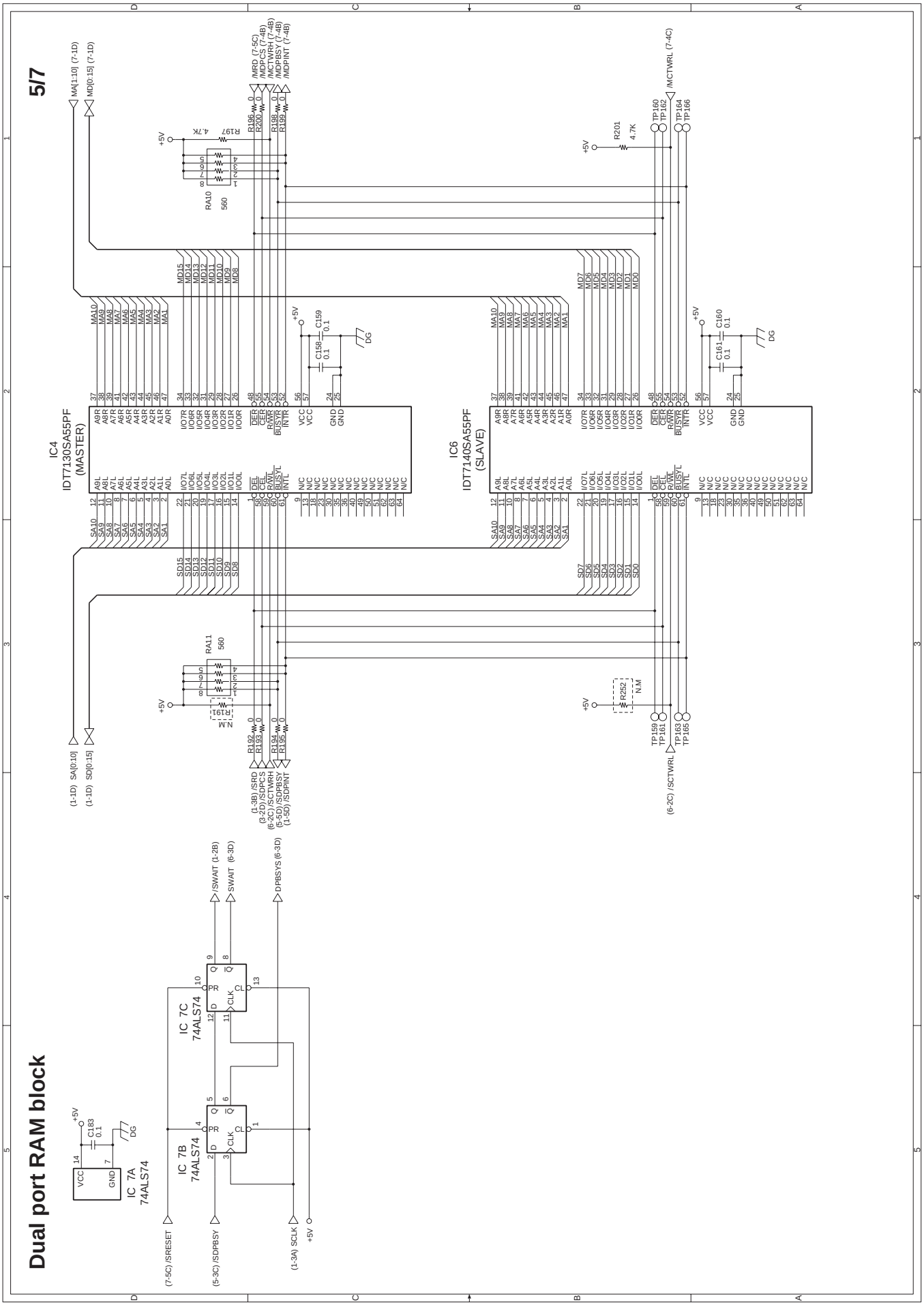
1/7

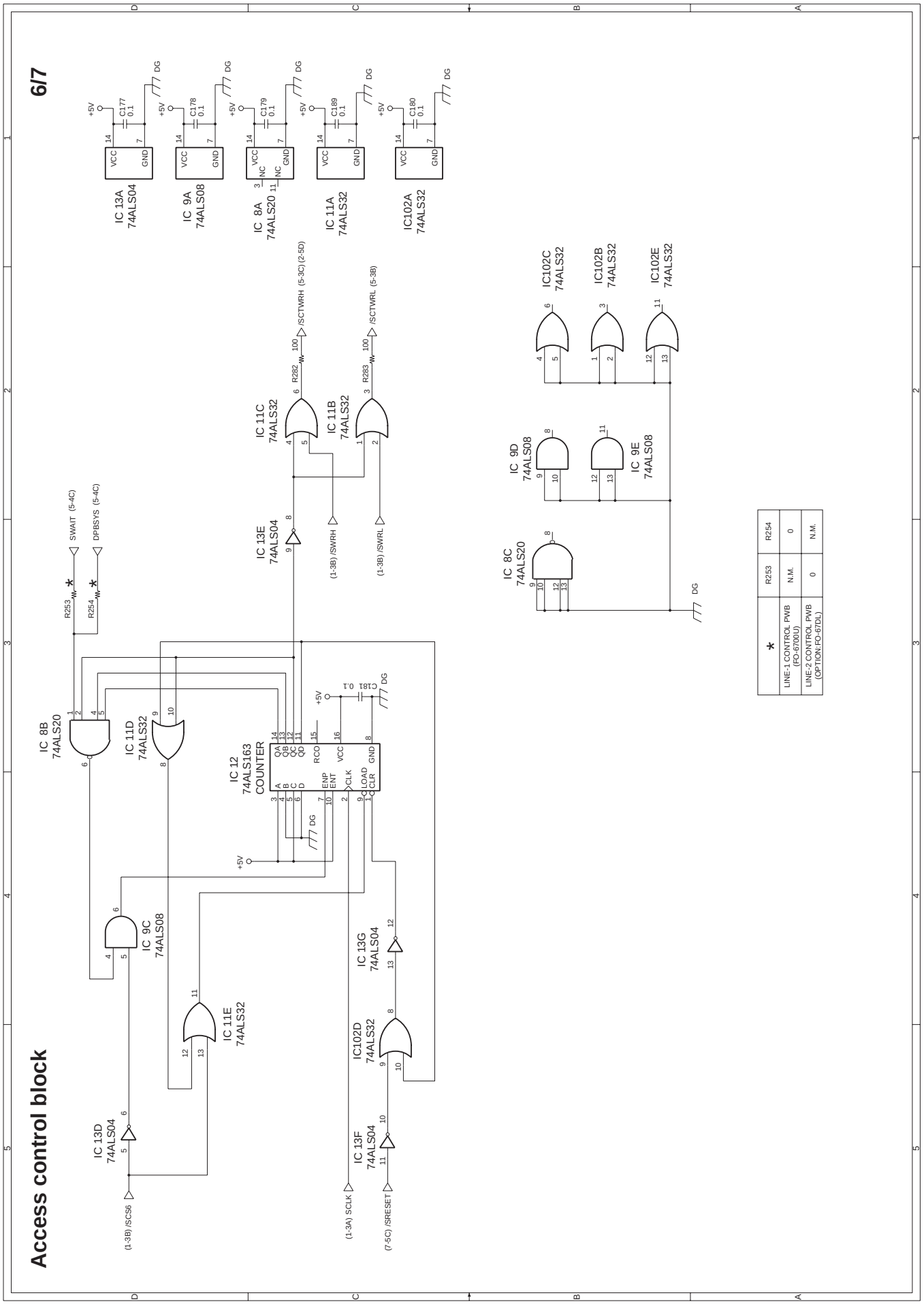



Modem block
2/7
IC1
R288F
33600bps FAX MODEM
IC 13C
74ALS04
IC100A
NJM2902
IC100B
NJM2902
IC100C
NJM2902
IC100D
NJM2902
IC 2A
HCF4053
IC 2B
HCF4053
IC 2C
HCF4053
IC 2D
HCF4053
REG100
NJM78L05UA
TXOUT (7-4D)
RXIN (7-4D)
EXTSIG (7-4D)
(1-5C) TXMUTE
(1-5C) GAINC
(2-3C) VREF
VREF (2-3C)
VREF (2-2D) (2-3D) (2-2C)
MAG
DG
+5V
+12V
+5VA
56.448MHz
/MDMINT
/MDMRST
/MDMCS

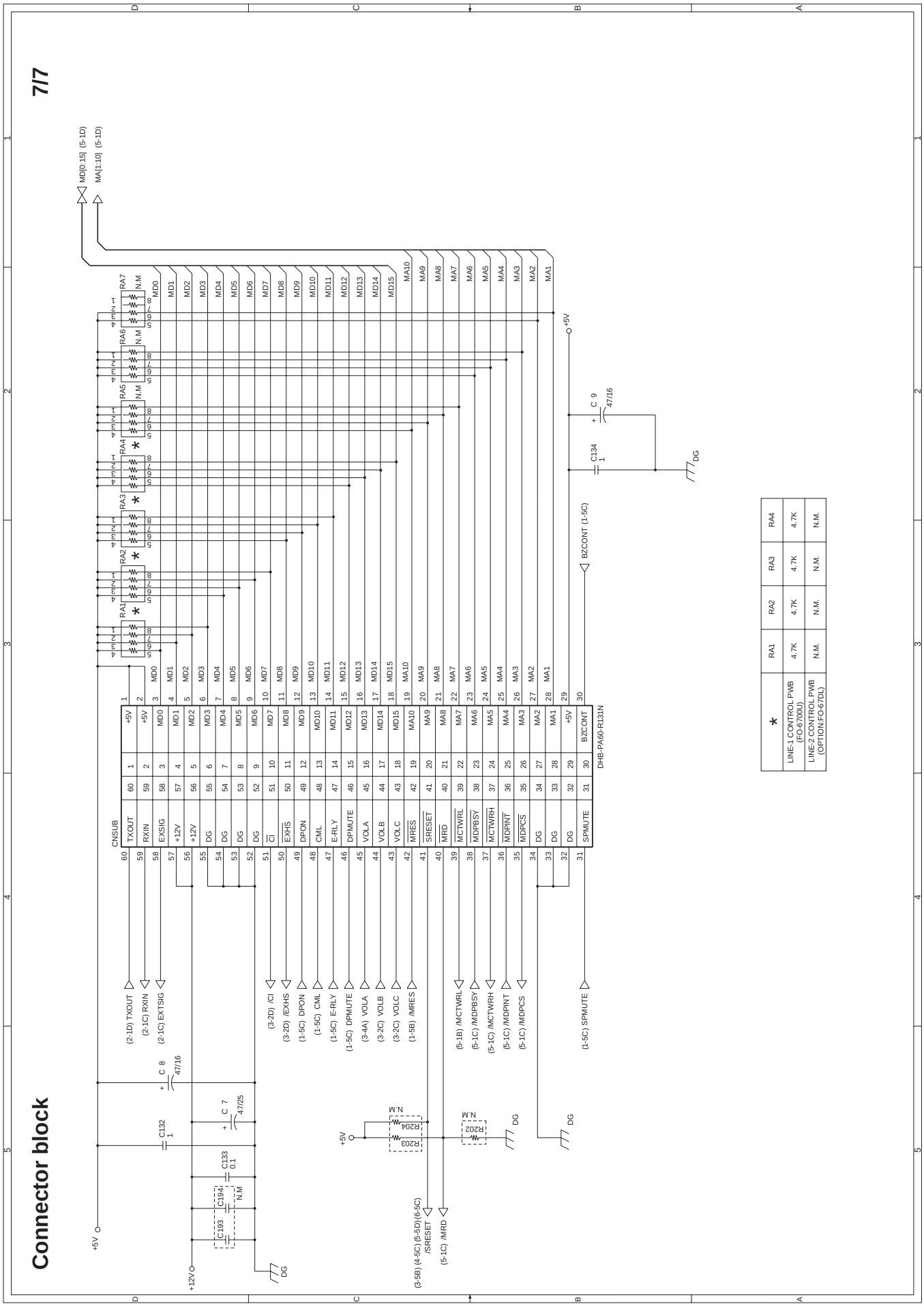

3/7
Gate array block
IC 5
LZ9FJ59
GATE ARRAY(A)
(1-1D) SA[0:21]
(1-1D) SD[0:15]
(4-5D) AO[1:4]
(1-3B) /SCS2
(1-3B) /SCS6
(1-5D) /QMCINT
(1-3A) (5-5C) SCLK
(7-5C) /SRESET
(1-3B) /SRD
(1-3B) /SWRH
(1-3B) /SWRL
VOLA (7-4C)
* LINE-1 CONTROL PWB (FO-6700U) R255 270 N.M. N.M.
* LINE-2 CONTROL PWB (OPTION:FO-67DL) R256 270 N.M. R257 270 N.M.


4/7
QM-coder block
IC 3
M65761FP
QM-CODER
(3-5D) AO[1:4]
(1-1D) SD[0-15]
(7-5C) /SRESET
(3-2C) /QMCS1
(3-2C) /QMWR
(3-2C) /QMRD
(3-2B) /QMCDAK
(3-2B) /QMCDRQ
(3-2C) QMCINT
(3-2B) /QMPDAK
(3-2C) /QMWR
(3-2C) /QMRD
(3-2B) QMPDRQ
(1-3A) SCLK
+5V
DG
R125 0
R126 10K
R127 10K
R128 0
R129 0
C129 1000P
C130 N.M
C199 100P
C200 100P
C131 N.M
C118 0.1
C119 0.1
C120 0.1
C121 0.1
C122 0.1
C123 0.1
C124 0.1
C125 0.1
C126 0.1
C127 0.1
C128 0.1

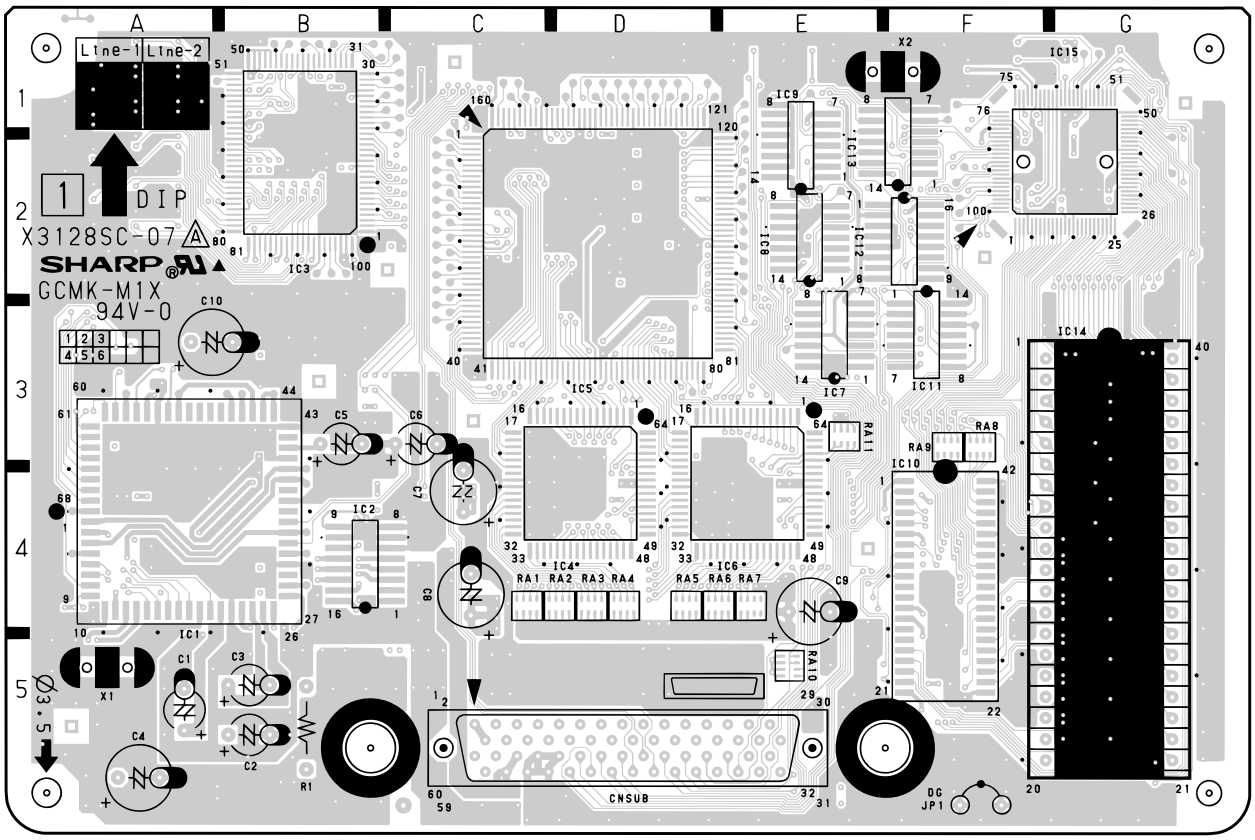

5/7
Dual port RAM block
IC4
IDT7130SA55PF
(MASTER)
IC6
IDT7140SA55PF
(SLAVE)
IC 7A
74ALS74
IC 7B
74ALS74
IC 7C
74ALS74
RA10
560
RA11
560
R201
4.7K
R197
4.7K
R191
N.M
R252
N.M
MA[1:10] (7-1D)
MD[0:15] (7-1D)
(1-1D) SA[0:10]
(1-1D) SD[0:15]
/MRD (7-5C)
/MDPCS (7-4B)
/MCTWRH (7-4B)
/MDRST (7-4B)
/MDPINT (7-4B)
/MCTWRL (7-4C)
(1-3B) /SRD
(3-2D) /SDPCS
(6-2C) /SCTWRH
(5-5D) /SDPRST
(1-5D) /SDPINT
(6-2C) /SCTWRL
(7-5C) /SRESET
(5-3C) /SDPBSY
(1-3A) SCLK
SWAIT (1-2B)
SWAIT (6-3D)
DPBSYS (6-3D)



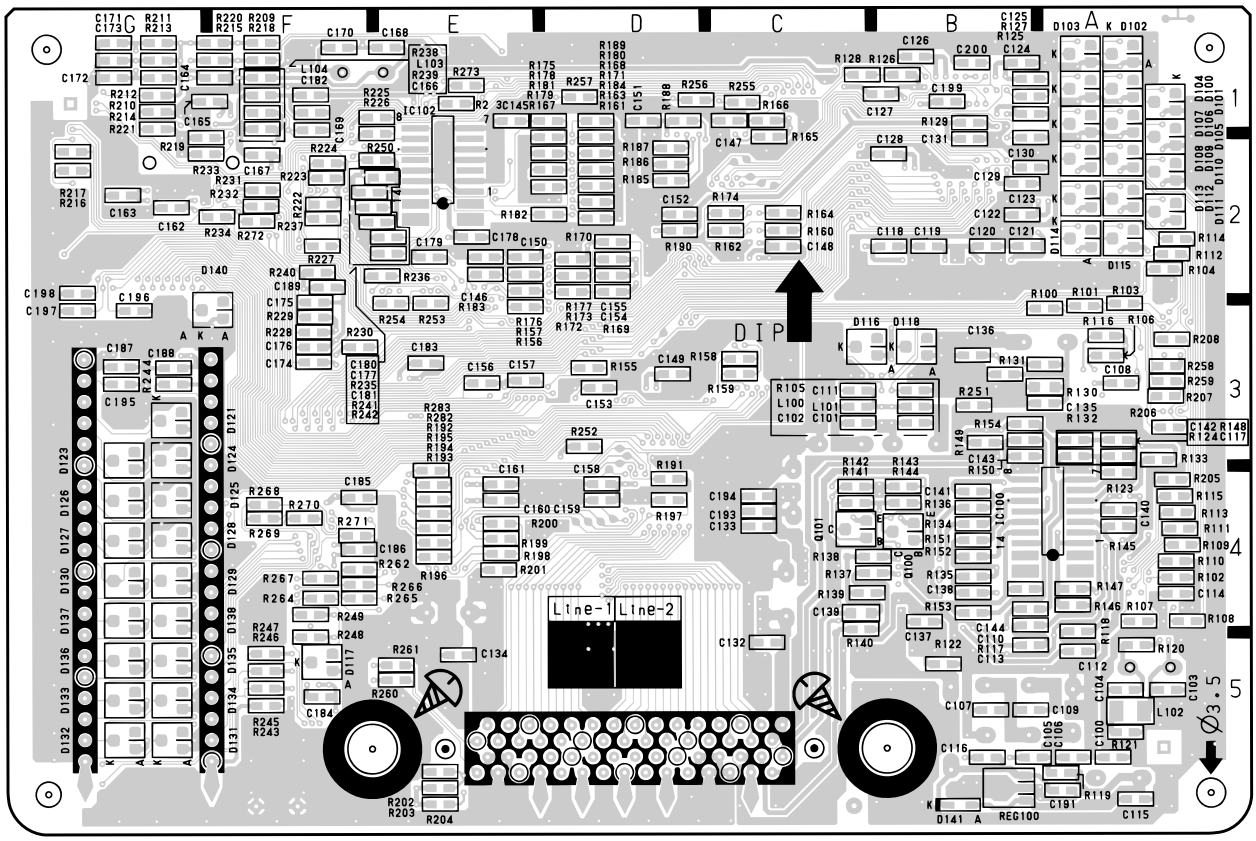
*	R253	R254
LINE-1 CONTROL PWB (FO-6700U)	N.M.	0
LINE-2 CONTROL PWB (OPTION:FO-67DL)	0	N.M.


7/7
Connector block
CNSUB
DHB-PA60-R131N
MD[0:15] (5-1D)
MA[1:10] (5-1D)
(2-1D) TXOUT
(2-1C) RXIN
(2-1C) EXTSIG
(3-2D) /CI
(3-2D) /EXHS
(1-5C) DPON
(1-5C) CML
(1-5C) E-RLY
(1-5C) DPMUTE
(3-4A) VOLA
(3-2C) VOLB
(3-2C) VOLC
(1-5B) /MRES
(5-1B) /MCTWRL
(5-1C) /MDPBSY
(5-1C) /MCTWRH
(5-1C) /MDPINT
(5-1C) /MDPCS
(1-5C) SPMUTE
BZCONT (1-5C)
(3-5B) (4-5C) (5-5D) (6-5C) /SRESET
(5-1C) /MRD
* RA1 RA2 RA3 RA4
LINE-1 CONTROL PWB (FO-6700U) 4.7K 4.7K 4.7K 4.7K
LINE-2 CONTROL PWB (OPTION:FO-67DL) N.M. N.M. N.M. N.M.

Line Control PWB parts layout (Top side)

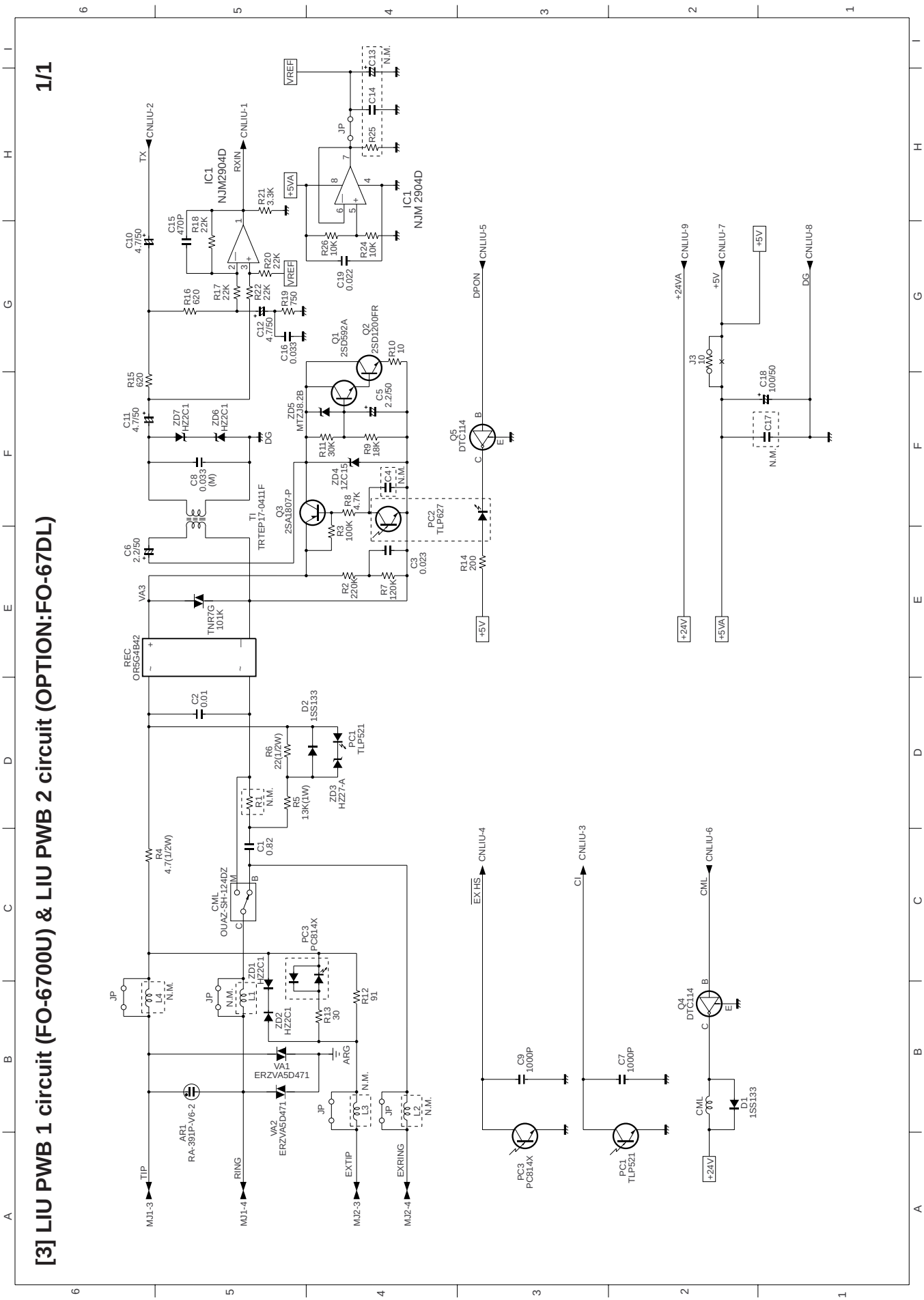


Line Control PWB parts layout (Bottom side)

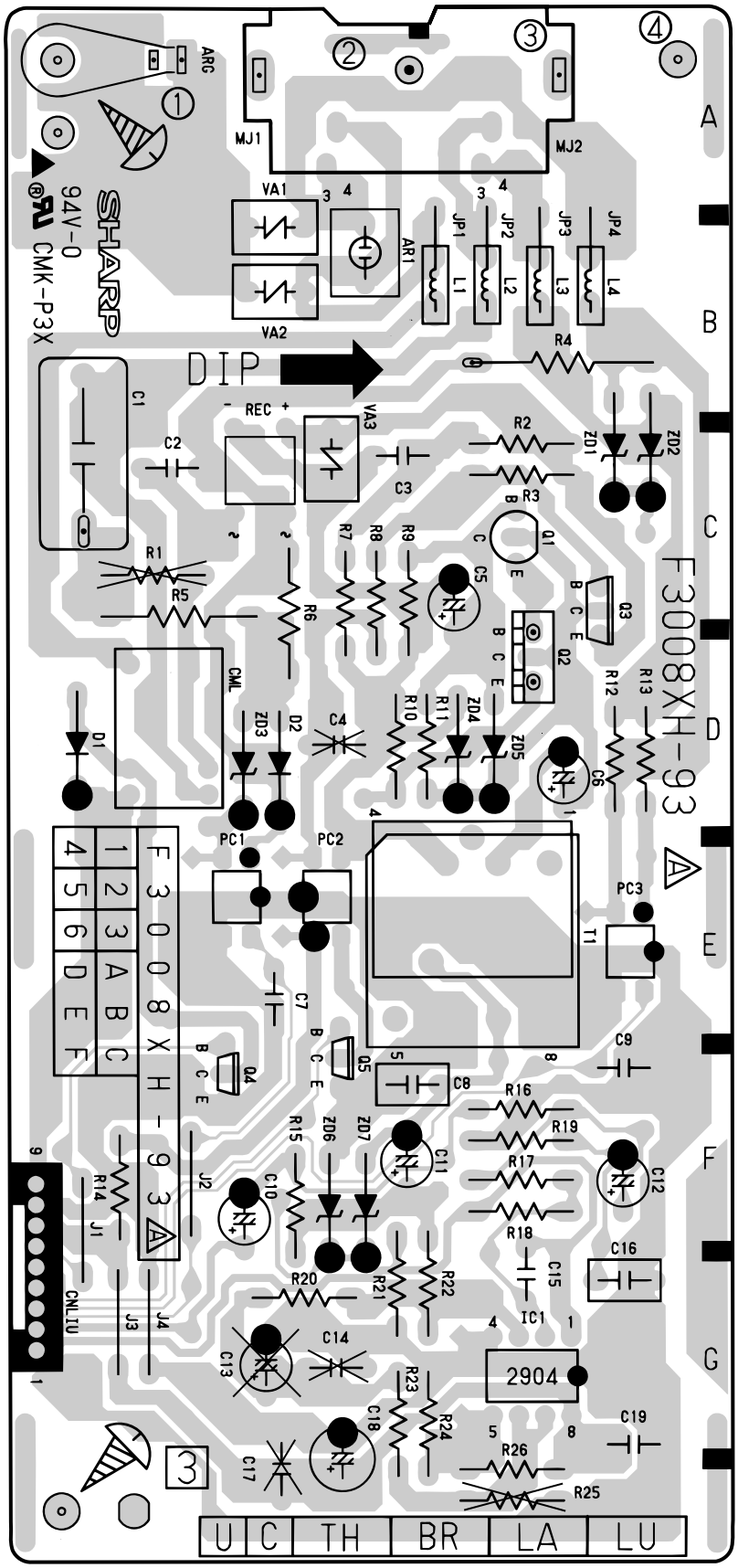


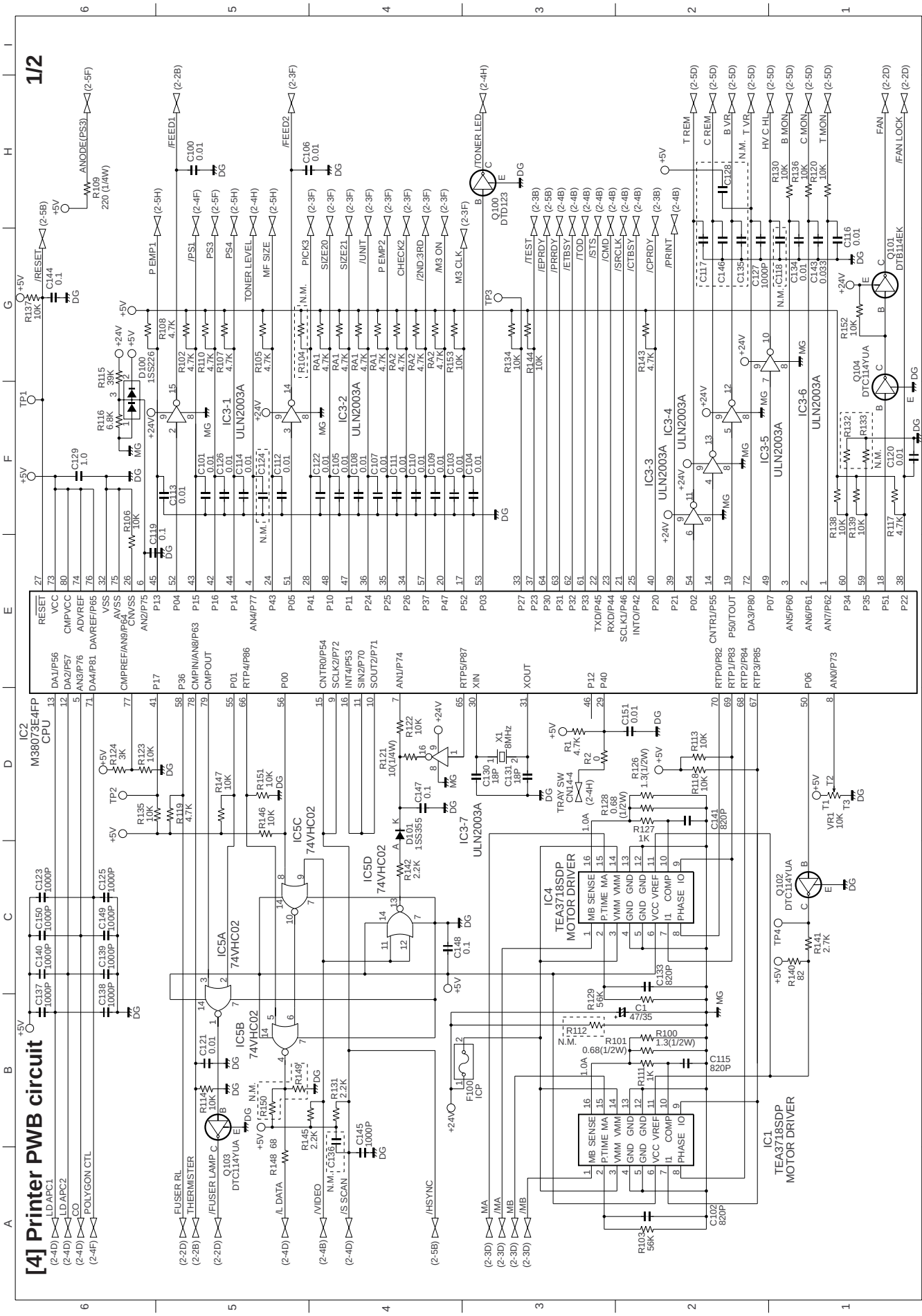
[3] LIU PWB 1 circuit (FO-6700U) & LIU PWB 2 circuit (OPTION:FO-67DL)

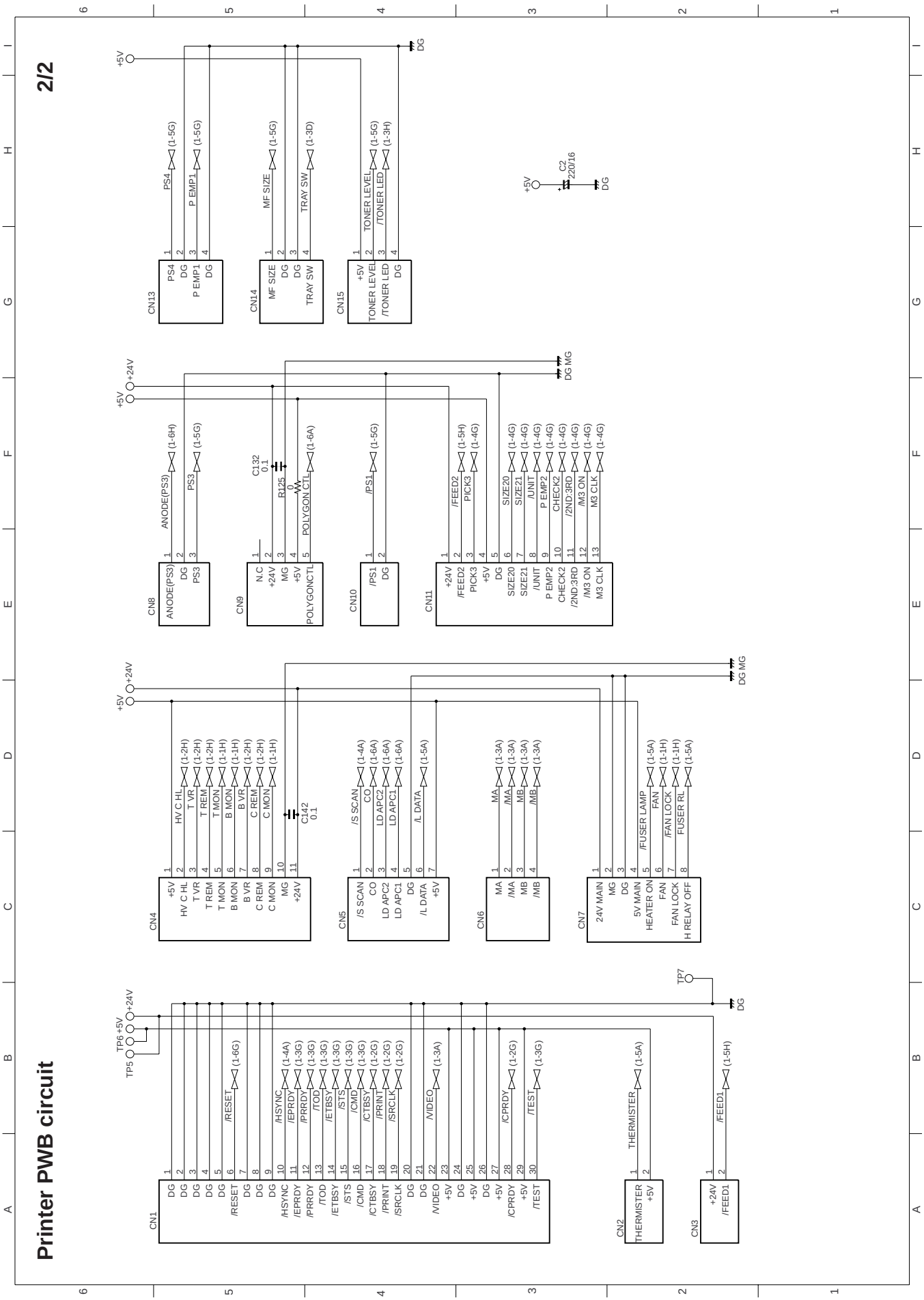
1/1



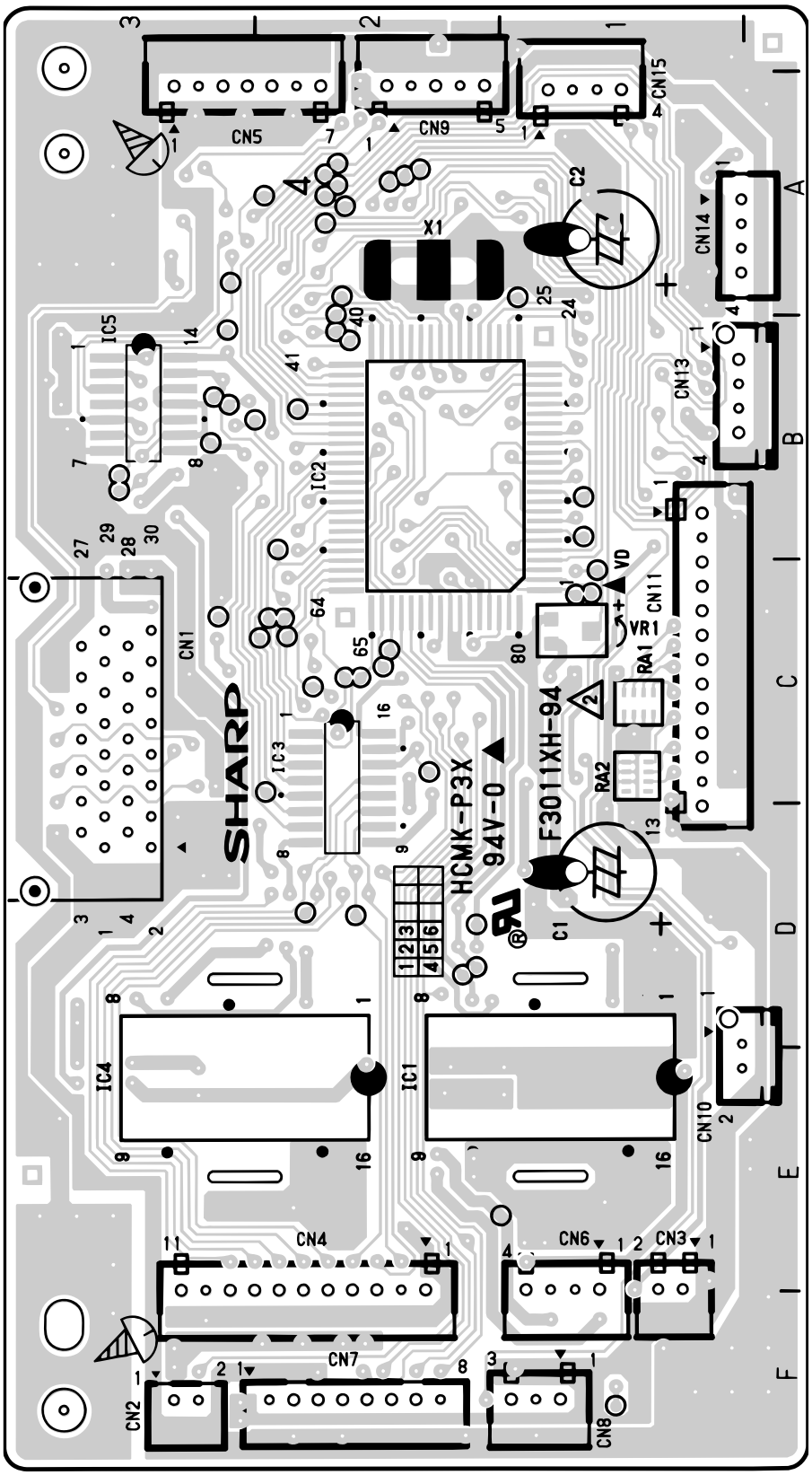
LIU PWB parts layout



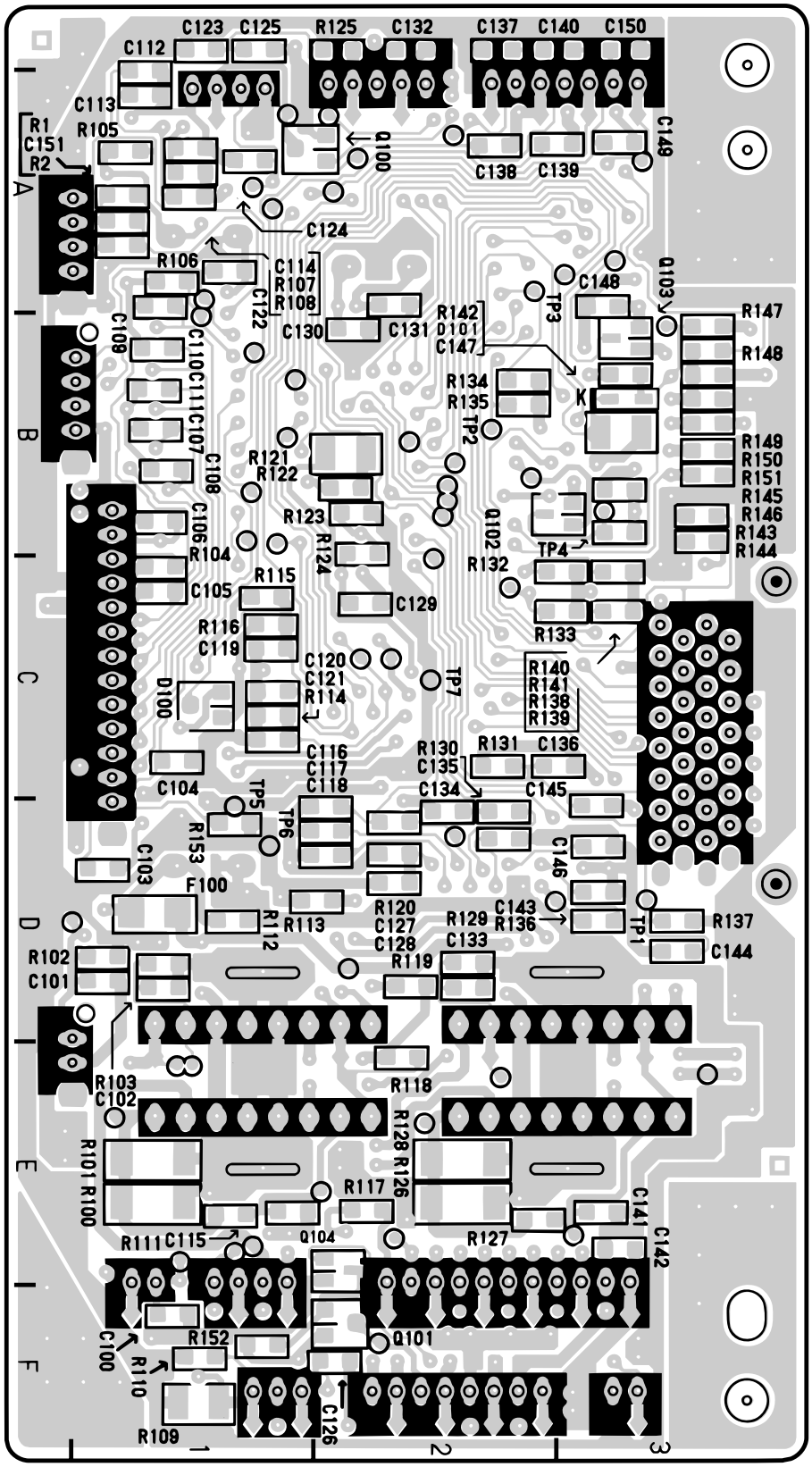

[4] Printer PWB circuit
1/2
IC2
M38073E4FP
CPU
IC1
TEA3718SDP
MOTOR DRIVER
IC4
TEA3718SDP
MOTOR DRIVER
IC3-1
IC3-2
IC3-3
IC3-4
IC3-5
IC3-6
IC3-7
ULN2003A
IC5A
74VHC02
IC5B
74VHC02
IC5C
74VHC02
IC5D
74VHC02
Q100
DTD123
Q101
DTB114EK
Q102
DTC114YUA
Q103
DTC114YUA
Q104
DTC114YUA
D100
1SS226
D101
1SS355
X1
8MHz
F100
ICP
TRAY SW
CN144-4
TONER LED
FUSER RL
THERMISTER
/FUSER LAMP C
LD APC1
LD APC2
CO
POLYGON CTL
/L DATA
/VIDEO
/S SCAN
/HSYNC
MA
/MA
MB
/MB
ANODE(PS3)
FAN
/FAN LOCK
P EMP1
/PS1
PS3
PS4
TONER LEVEL
MF SIZE
/FEED1
/FEED2
PICK3
SIZE20
SIZE21
/UNIT
P EMP2
CHECK2
/2ND-3RD
/M3 ON
M3 CLK
/TEST
/EPRDY
/PRRDY
/ETBSY
/TOD
/STS
/CMD
/SRCLK
/CTBSY
/CPRDY
/PRINT
T REM
C REM
B VR
T VR
HV C HI
B MON
C MON
T MON
/RESET
+5V
+24V
DG
MG
N.M.

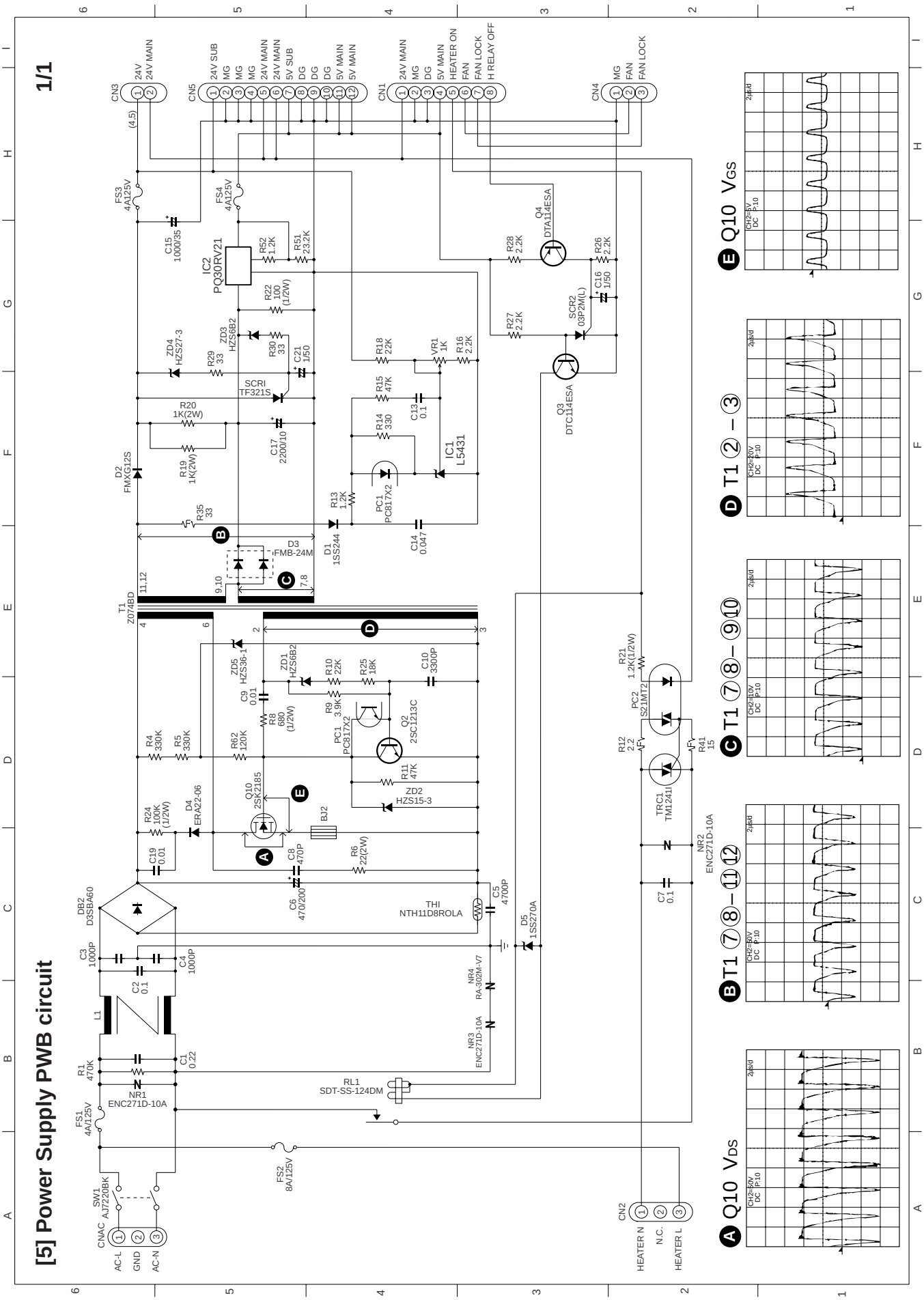

Printer PWB circuit
2/2
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN13
CN14
CN15
TP5
TP6
TP7
C132
C142
C2
R125
THERMISTER
/RESET
/HSYNC
/EPRDY
/PRRDY
/TOD
/ETBSY
/STS
/CMD
/CTBSY
/PRINT
/SRCLK
/VIDEO
/CPRDY
/TEST
/FEED1
HV C HL
T VR
T REM
T MON
B MON
B VR
C REM
C MON
/S SCAN
CO
LD APC2
LD APC1
/L DATA
MA
/MA
MB
/MB
24V MAIN
5V MAIN
HEATER ON
FAN
FAN LOCK
H RELAY OFF
/FUSER LAMP
/FAN LOCK
FUSER RL
ANODE(PS3)
PS3
POLYGON CTL
/PS1
/FEED2
PICK3
SIZE20
SIZE21
/UNIT
P EMP2
CHECK2
/2ND:3RD
/M3 ON
M3 CLK
PS4
P EMP1
MF SIZE
TRAY SW
TONER LEVEL
/TONER LED
+5V
+24V
DG
DG MG

Printer PWB parts layout (Top side)

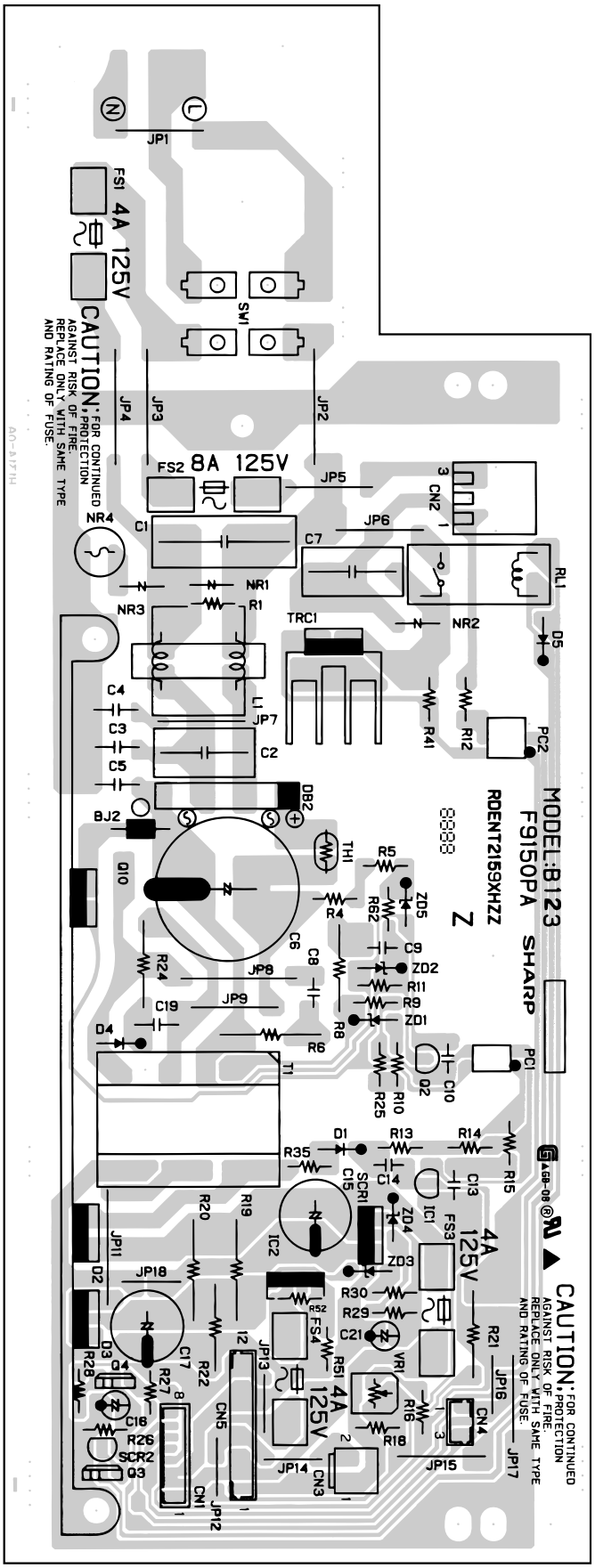


Printer PWB parts layout (Bottom side)



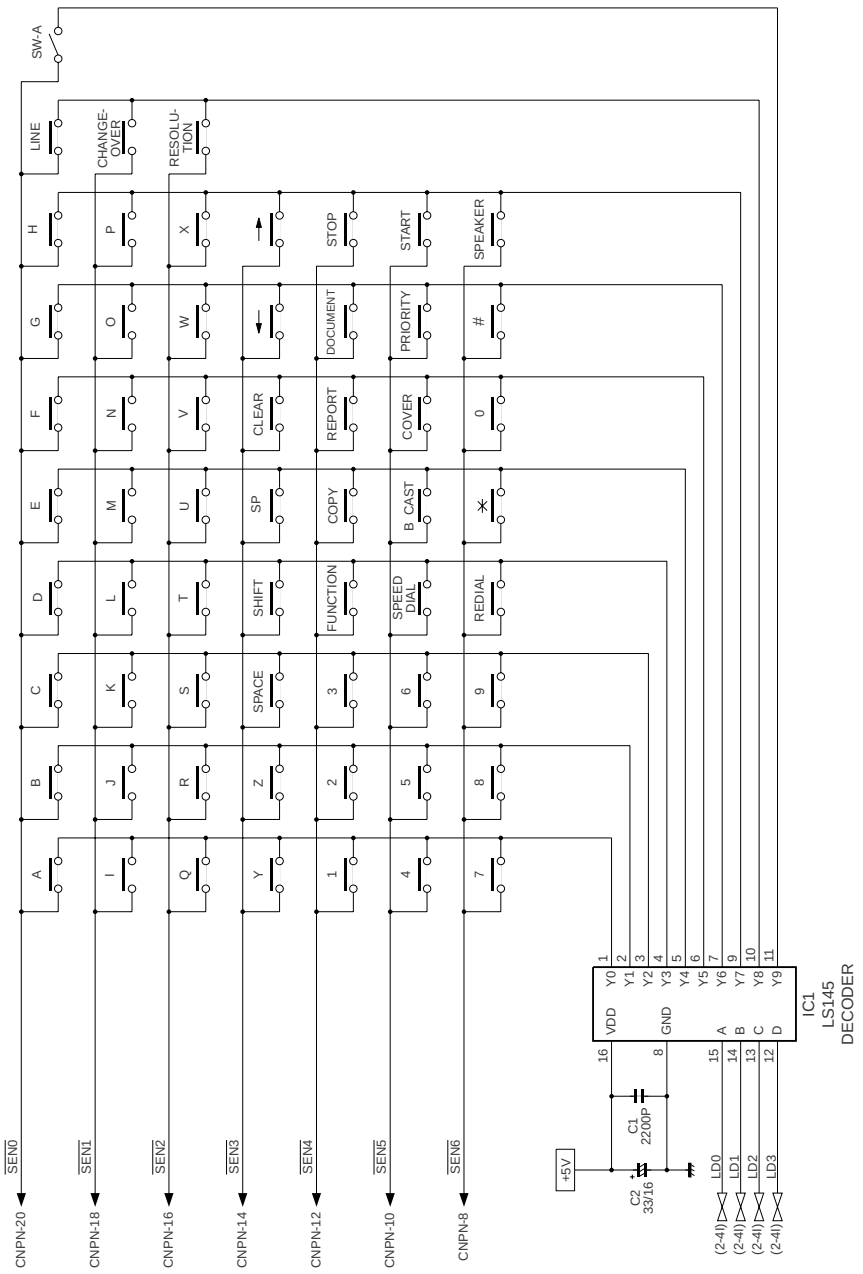

[5] Power Supply PWB circuit
1/1
CN3
CN5
CN1
CN4
CN2
IC1 L5431
IC2 PQ30RV21
T1 Z074BD
SCR1 TF321S
SCR2 03P2M(L)
Q1 2SK2185
Q2 2SC1213C
Q3 DTC114ESA
Q4 DTA114ESA
D1 1SS244
D2 FMXG12S
D3 FMB-24M
D4 ERA22-06
D5 1SS270A
DB2 D3SBA60
THI NTH11D8ROLA
PC1 PC817X2
PC2 S21MT2
TRC1 TM1241I
RL1 SDT-SS-124DM
SW1 AJ7220BK
NR1 ENC271D-10A
NR2 ENC271D-10A
NR3 ENC271D-10A
NR4 RA-302M-V7
FS1 4A/125V
FS2 8A/125V
FS3 4A125V
FS4 4A125V
AC-L
GND
AC-N
HEATER N
N.C.
HEATER L
A Q10 VDS
B T1 ⑦⑧–⑪⑫
C T1 ⑦⑧–⑨⑩
D T1 ②–③
E Q10 VGS

Power Supply PWB parts layout

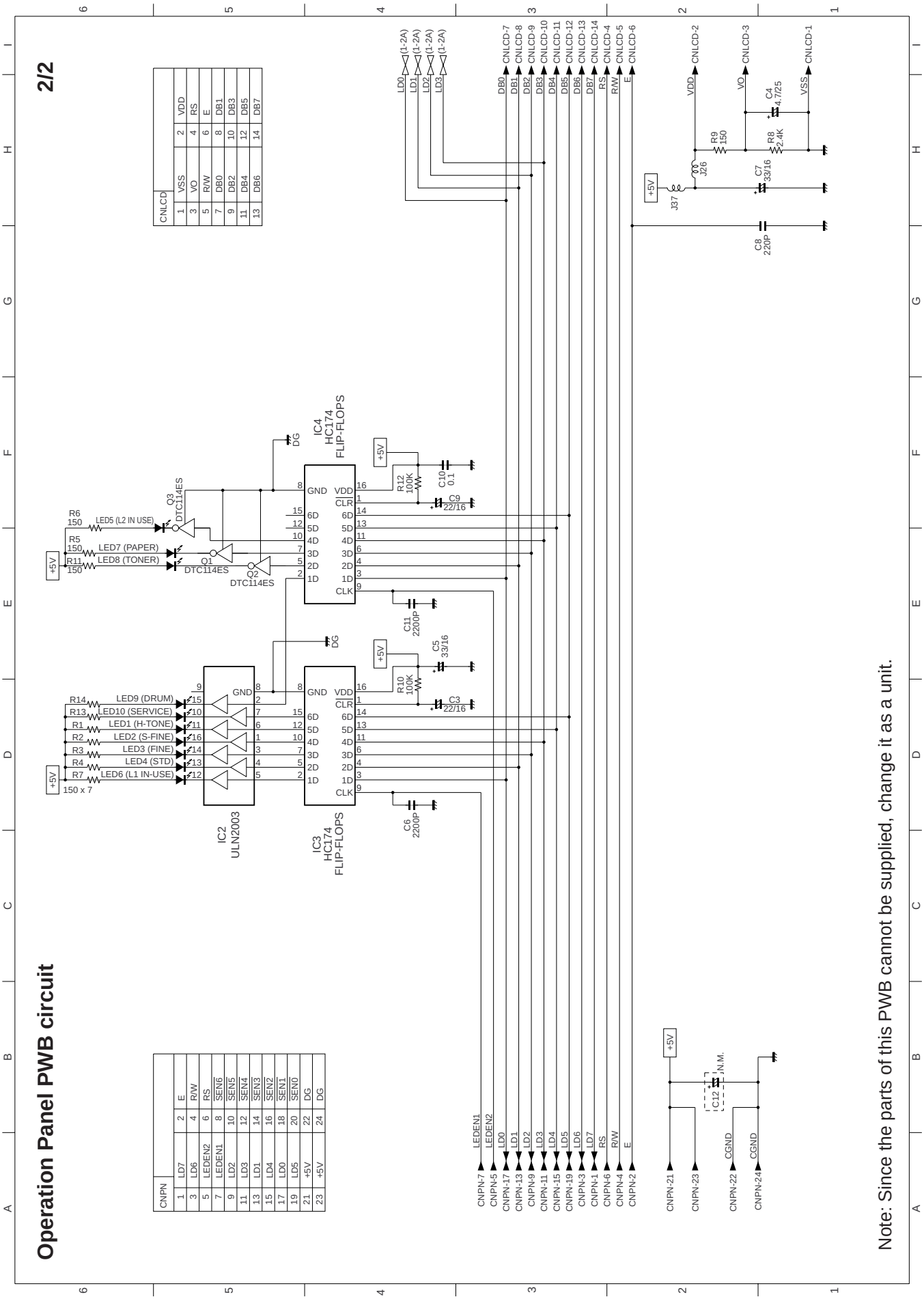


[6] Operation Panel PWB circuit

1/2

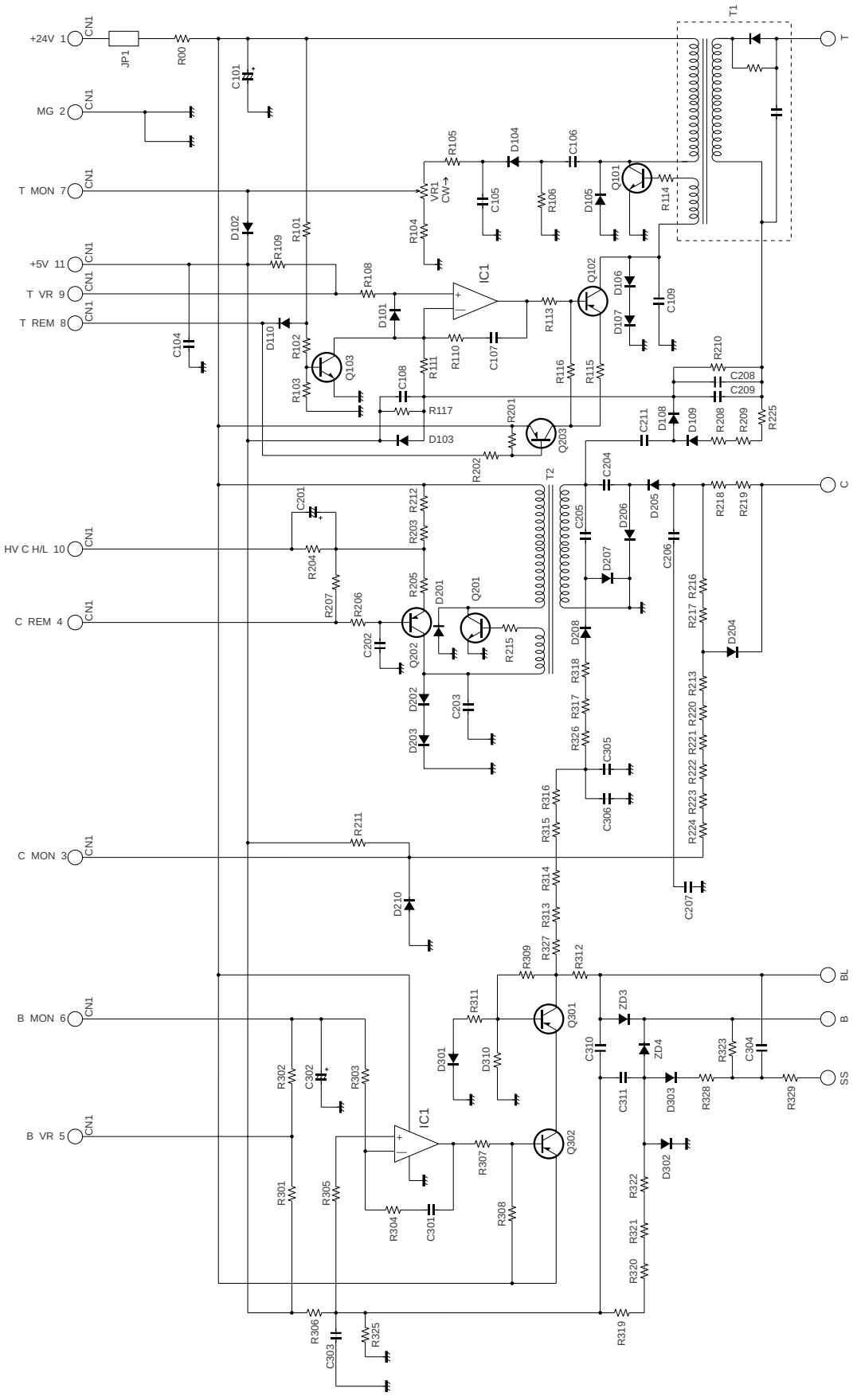


Note: Since the parts of this PWB cannot be supplied, change it as a unit.


2/2
Operation Panel PWB circuit
CNLCD
1 VSS
2 VDD
3 VO
4 RS
5 R/W
6 E
7 DB0
8 DB1
9 DB2
10 DB3
11 DB4
12 DB5
13 DB6
14 DB7
CNPN
1 LD7
2 E
3 LD6
4 R/W
5 LEDEN2
6 RS
7 LEDEN1
8 SEN6
9 LD2
10 SEN5
11 LD3
12 SEN4
13 LD1
14 SEN3
15 LD4
16 SEN2
17 LD0
18 SEN1
19 LD5
20 SEN0
21 +5V
22 DG
23 +5V
24 DG
IC2 ULN2003
IC3 HC174 FLIP-FLOPS
IC4 HC174 FLIP-FLOPS
LED9 (DRUM)
LED10 (SERVICE)
LED1 (H-TONE)
LED2 (S-FINE)
LED3 (FINE)
LED4 (STD)
LED6 (L1 IN-USE)
LED5 (L2 IN USE)
LED7 (PAPER)
LED8 (TONER)
150 x 7
Q1 DTC114ES
Q2 DTC114ES
Q3 DTC114ES
LD0 (1-2A)
LD1 (1-2A)
LD2 (1-2A)
LD3 (1-2A)
CNLCD-7
CNLCD-8
CNLCD-9
CNLCD-10
CNLCD-11
CNLCD-12
CNLCD-13
CNLCD-14
CNLCD-4
CNLCD-5
CNLCD-6
CNLCD-2
CNLCD-3
CNLCD-1
CNPN-7
CNPN-5
CNPN-17
CNPN-13
CNPN-9
CNPN-11
CNPN-15
CNPN-19
CNPN-3
CNPN-1
CNPN-6
CNPN-4
CNPN-2
CNPN-21
CNPN-23
CNPN-22
CNPN-24
LEDEN1
LEDEN2
LD0
LD1
LD2
LD3
LD4
LD5
LD6
LD7
RS
R/W
E
CGND
DG
+5V
N.M.
Note: Since the parts of this PWB cannot be supplied, change it as a unit.

[7] High Voltage PWB circuit

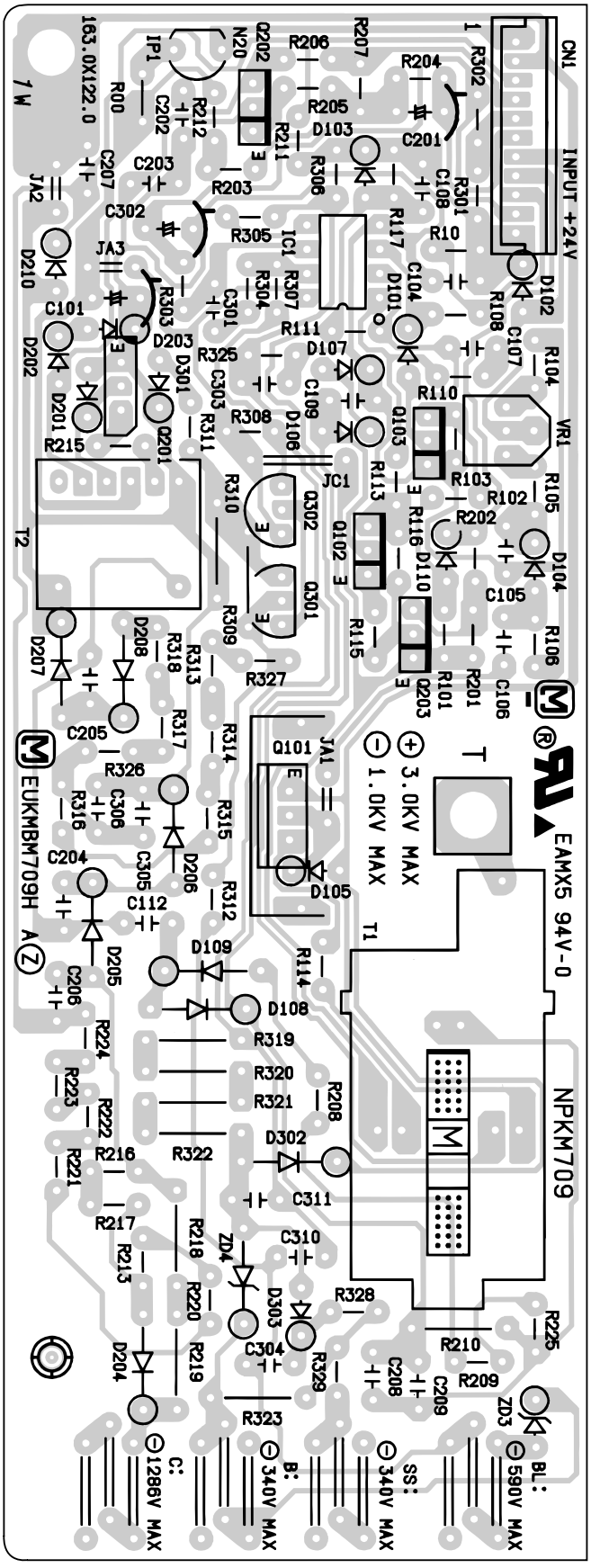
1/1



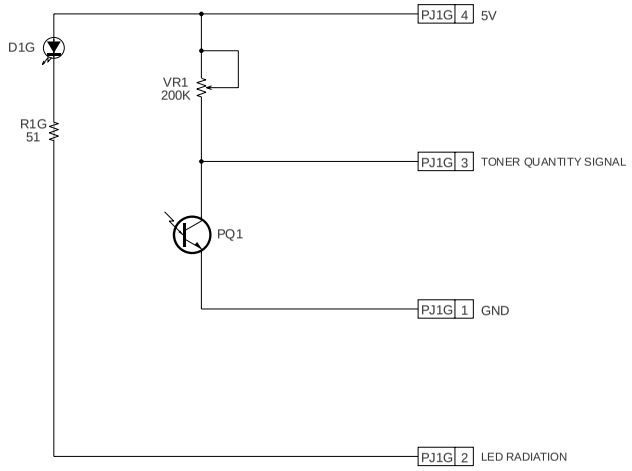
Note: Since the parts of this PWB cannot be supplied, change it as a unit.

High Voltage PWB parts layout

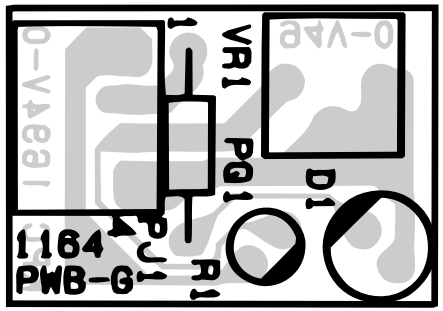
Note: Since the parts of this PWB cannot be supplied, change it as a unit.



[8] Toner Empty PWB circuit



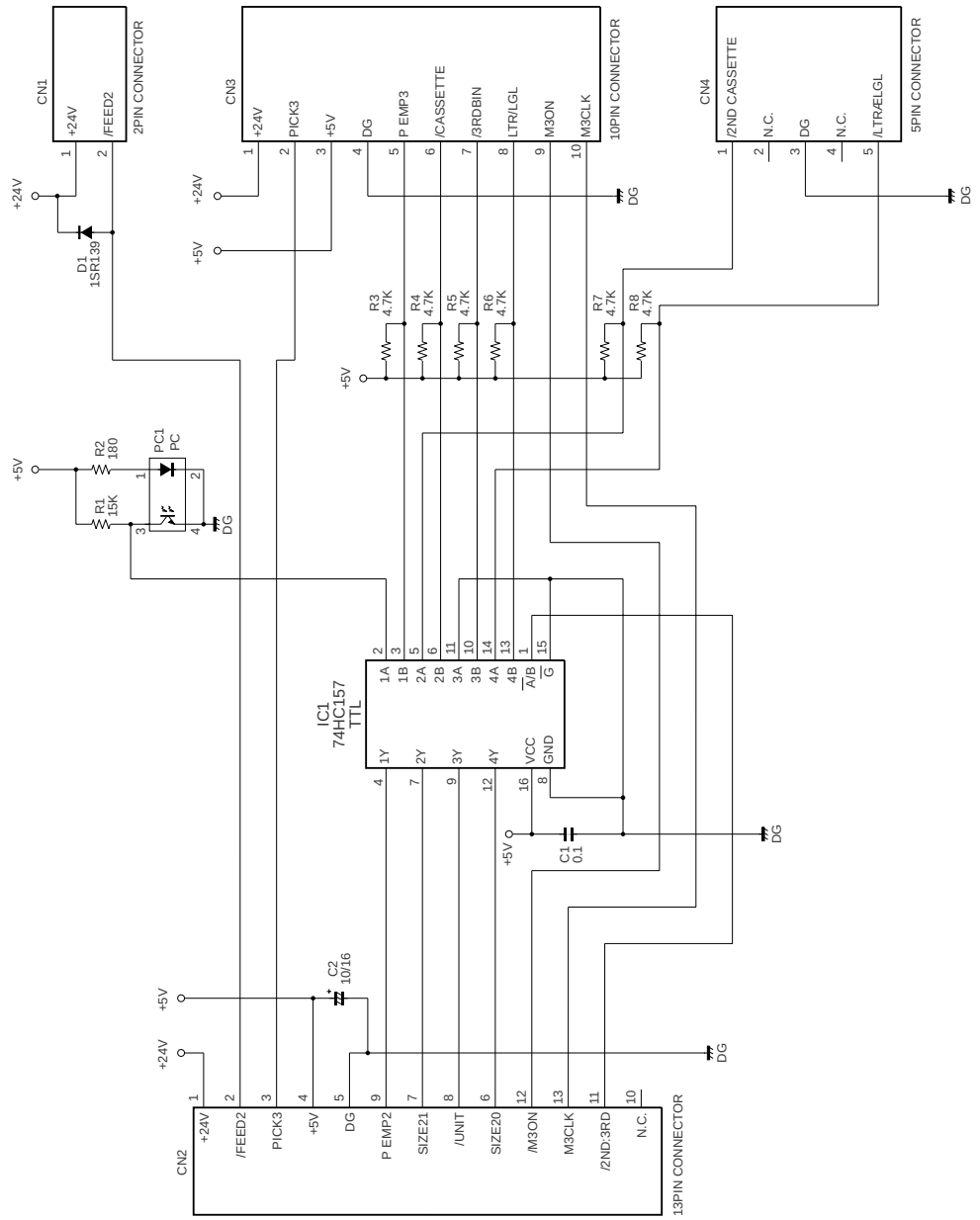
Toner Empty PWB parts layout



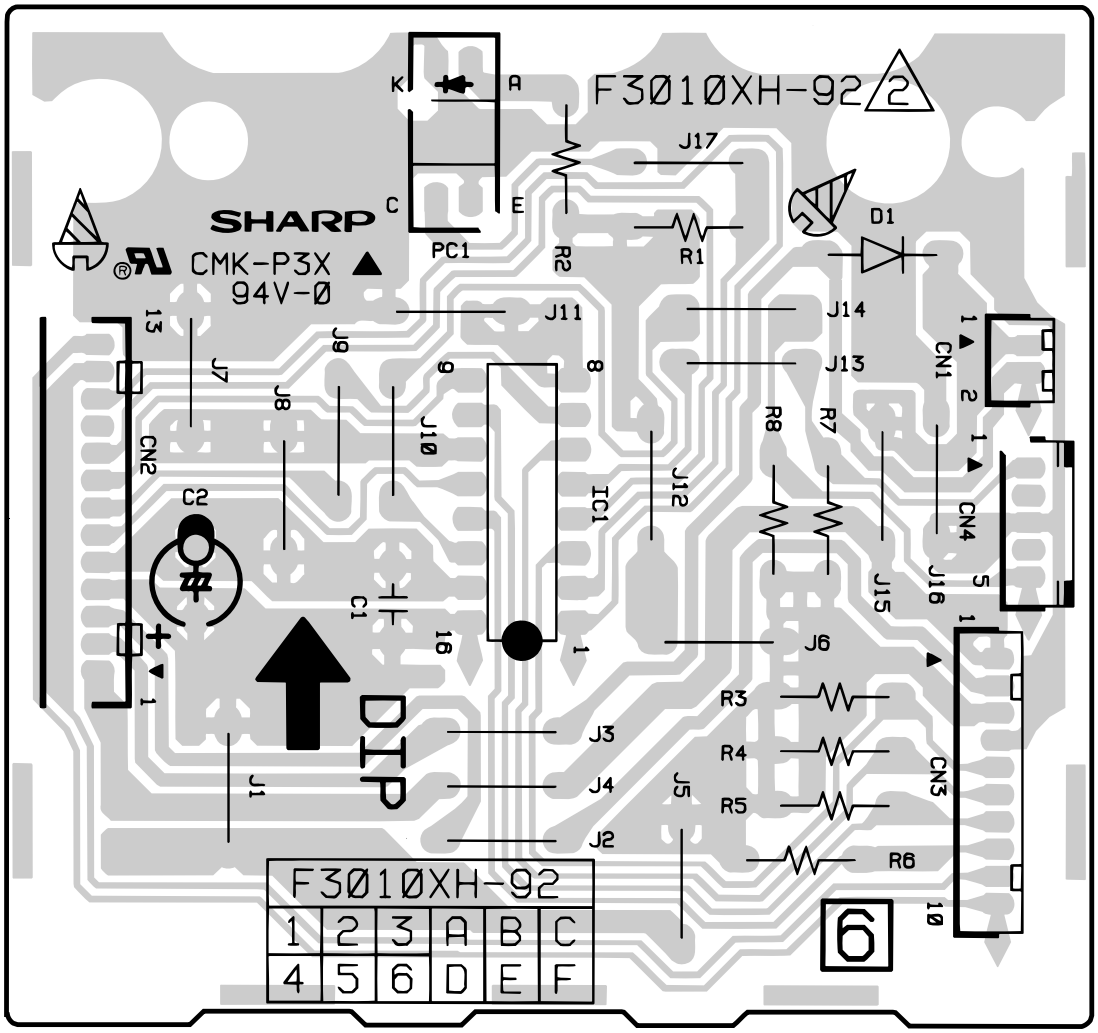
Note: Since the parts of this PWB cannot be supplied, change it as a unit.

[9] 2nd. Cassette PWB circuit

1/1

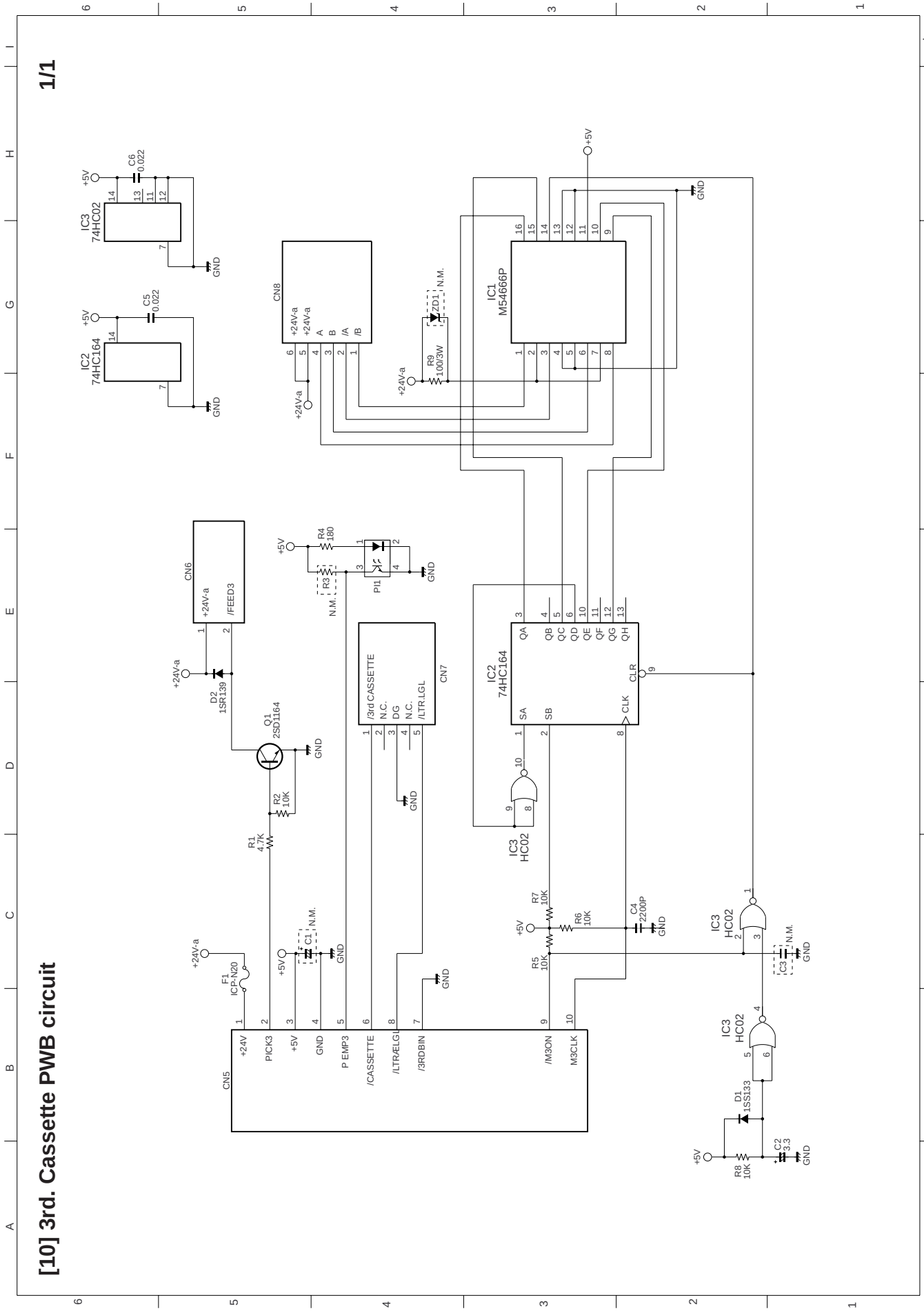


2nd. Cassette PWB parts layout

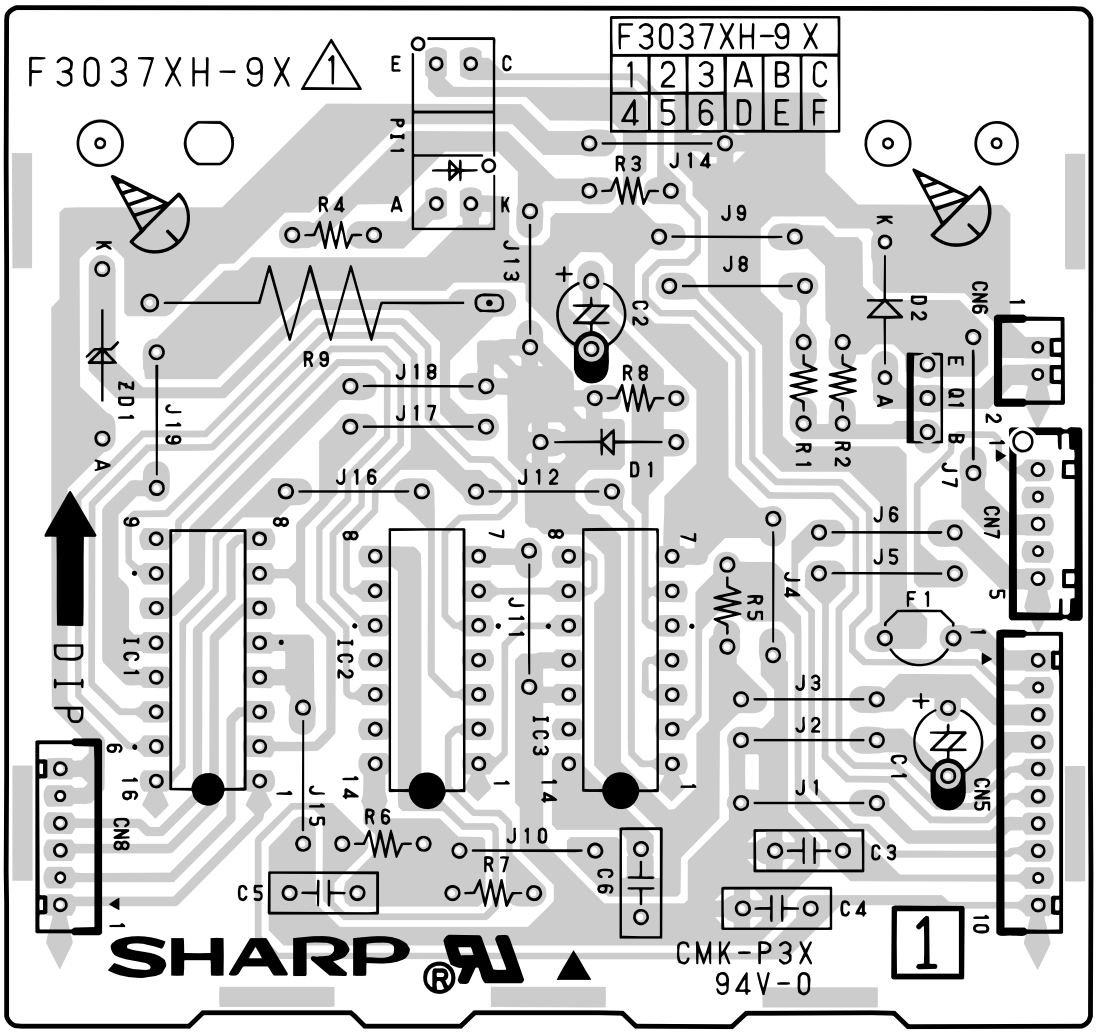


[10] 3rd. Cassette PWB circuit

1/1

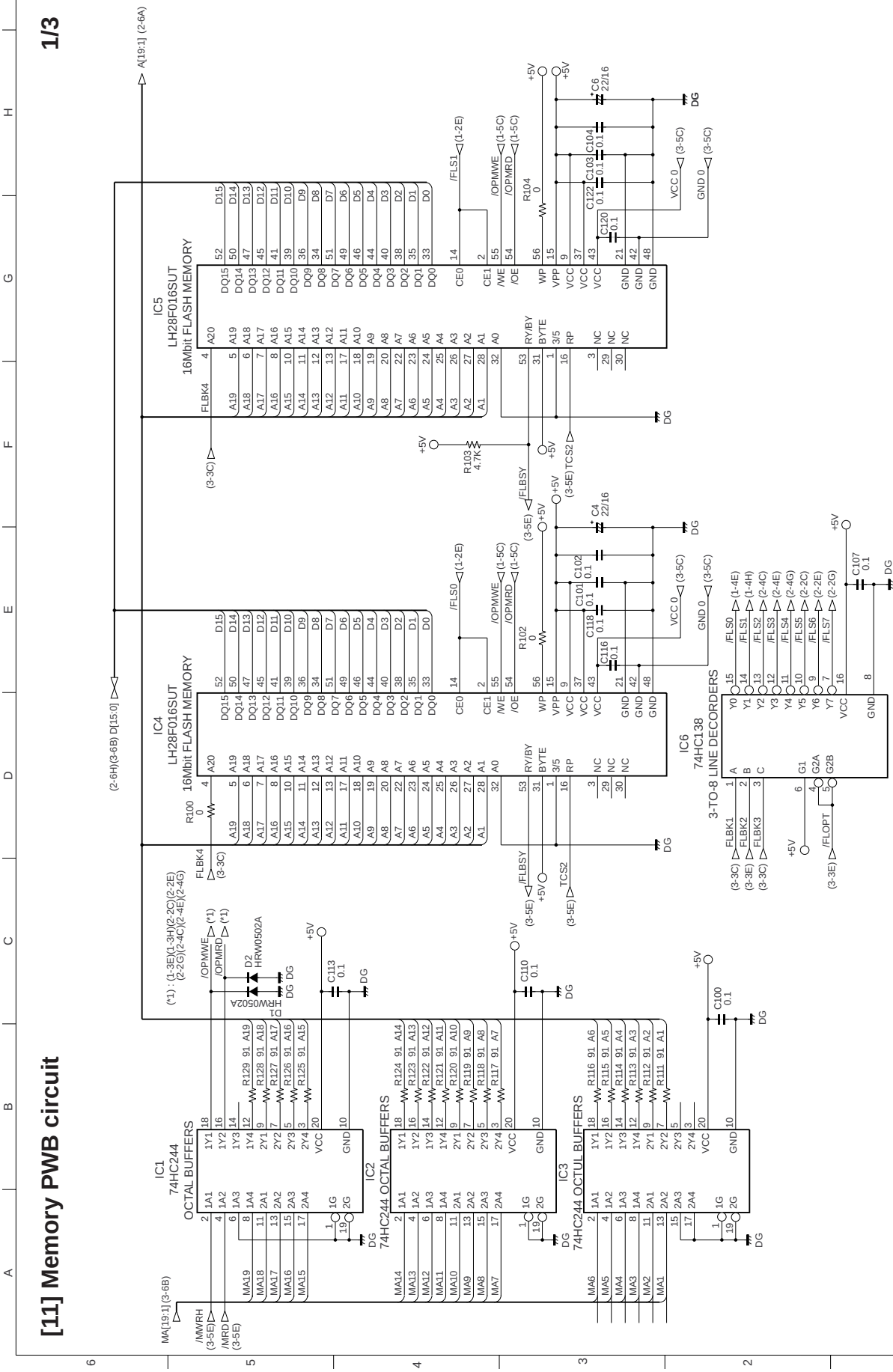


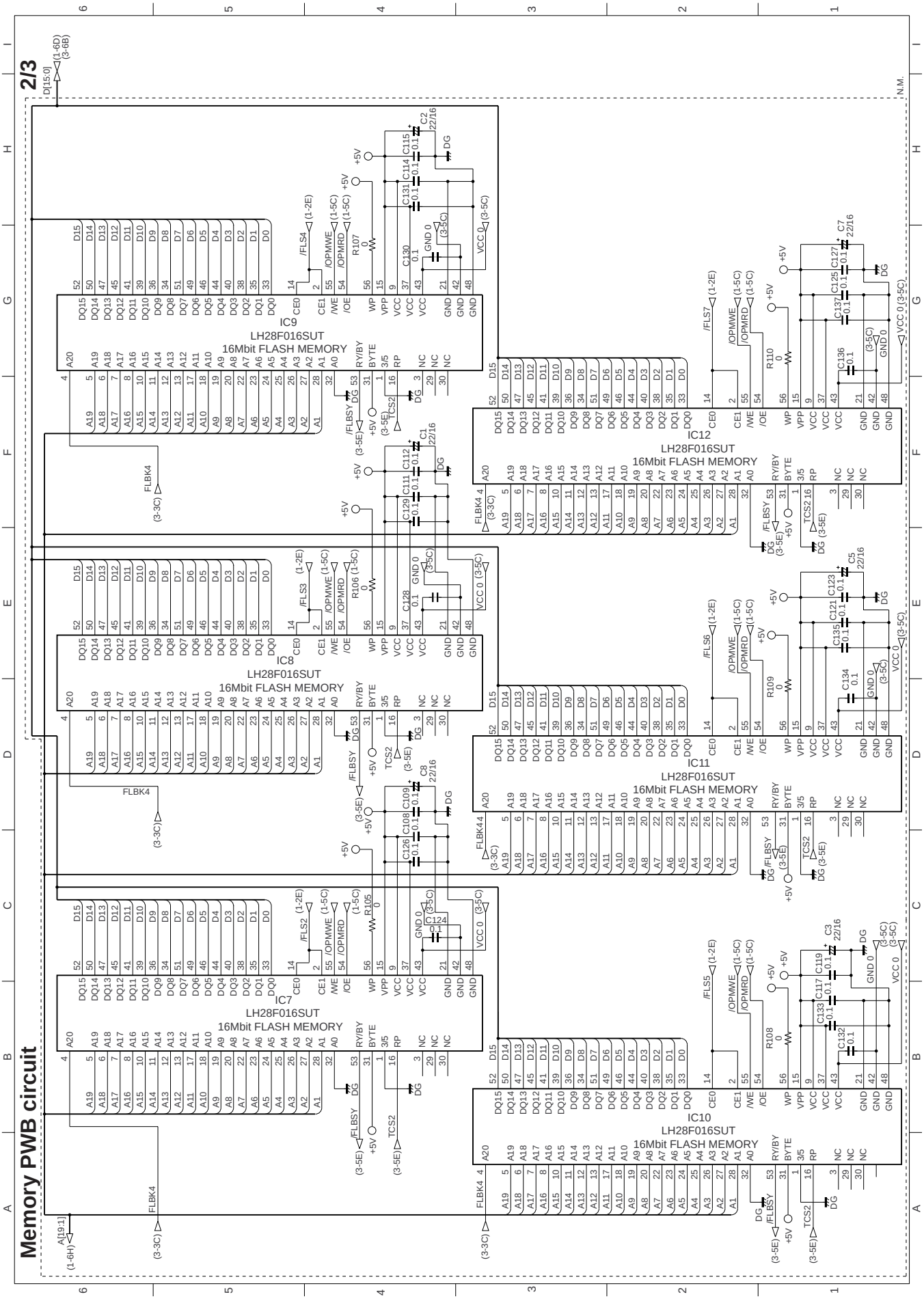
3rd. Cassette PWB parts layout



[11] Memory PWB circuit

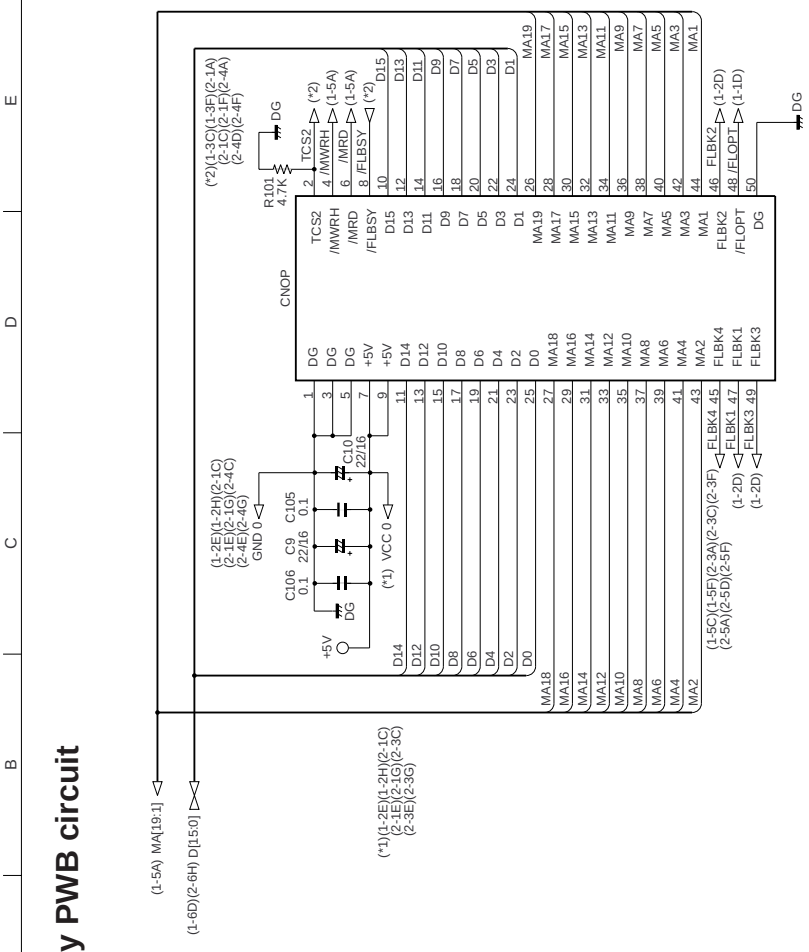
1/3



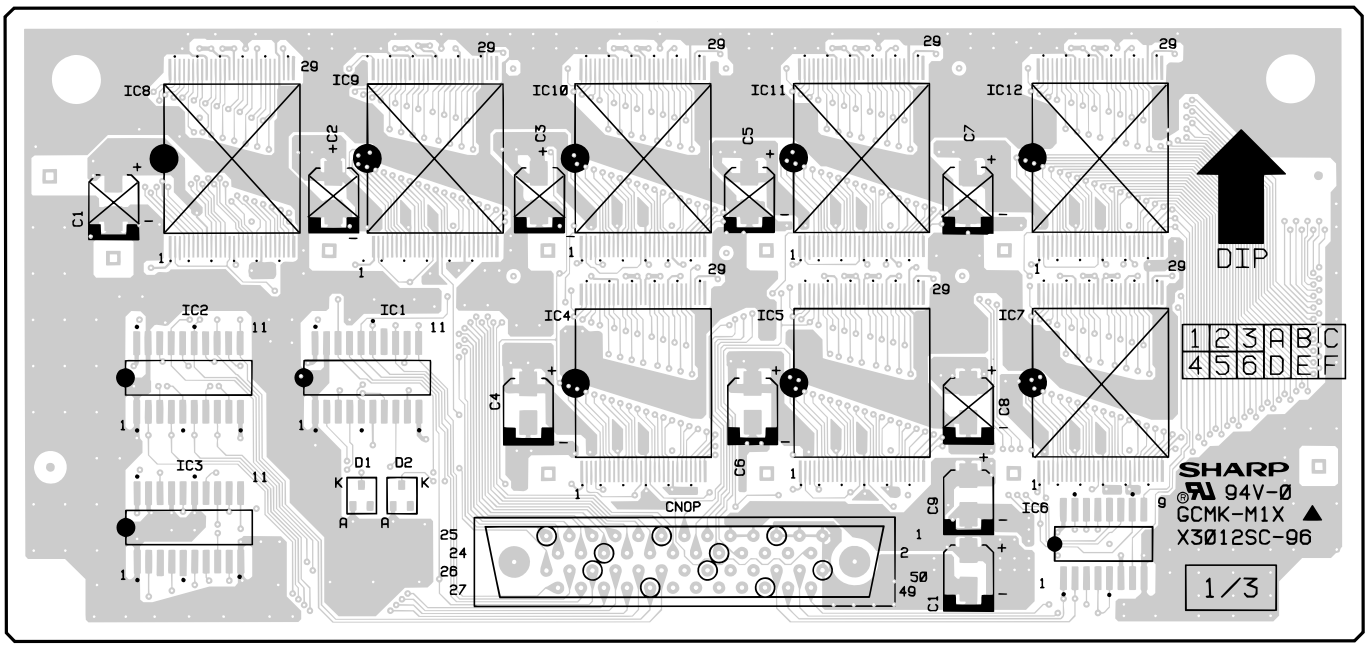

2/3
Memory PWB circuit
N.M.
D[15:0]
A[19:1]
IC7
IC8
IC9
IC10
IC11
IC12
LH28F016SUT
16Mbit FLASH MEMORY
/FLS2
/FLS3
/FLS4
/FLS5
/FLS6
/FLS7
/OPMWE
/OPMRD
FLBK4
/FLBSY
TCS2
R105
R106
R107
R108
R109
R110
C1
C2
C3
C5
C7
C8
VCC 0
GND 0
DG

Memory PWB circuit

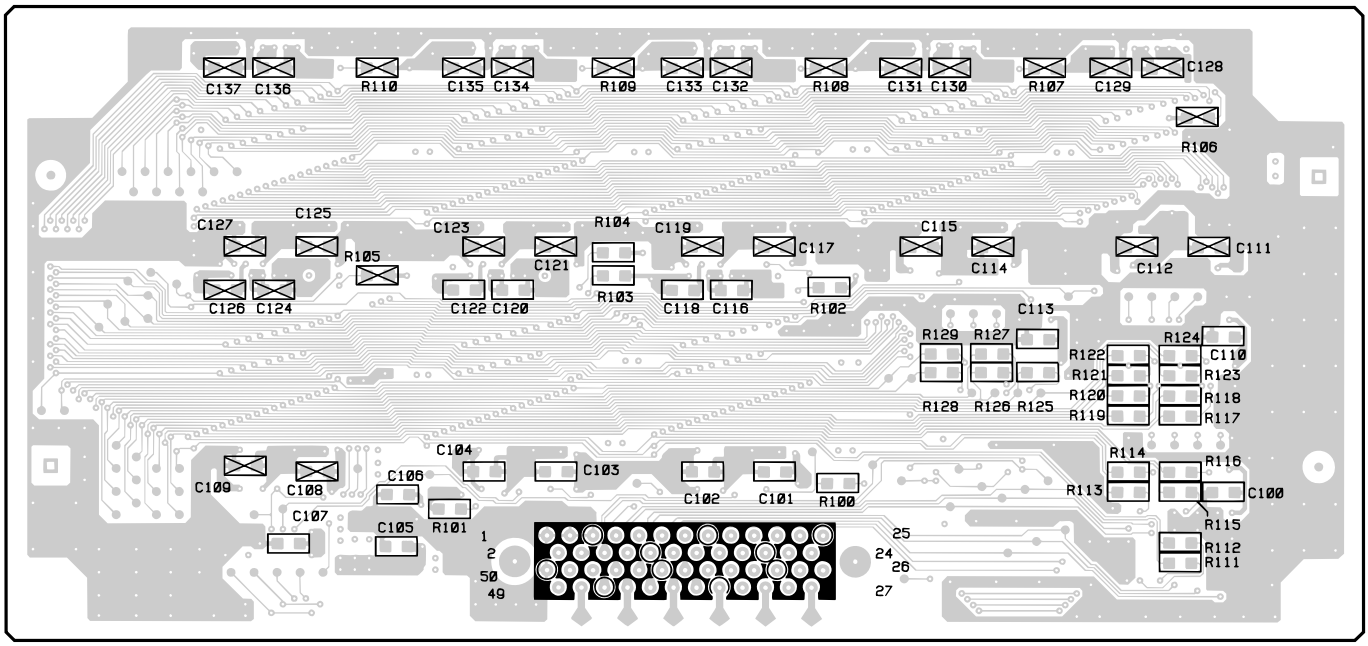
3/3



Memory PWB parts layout (Top side)

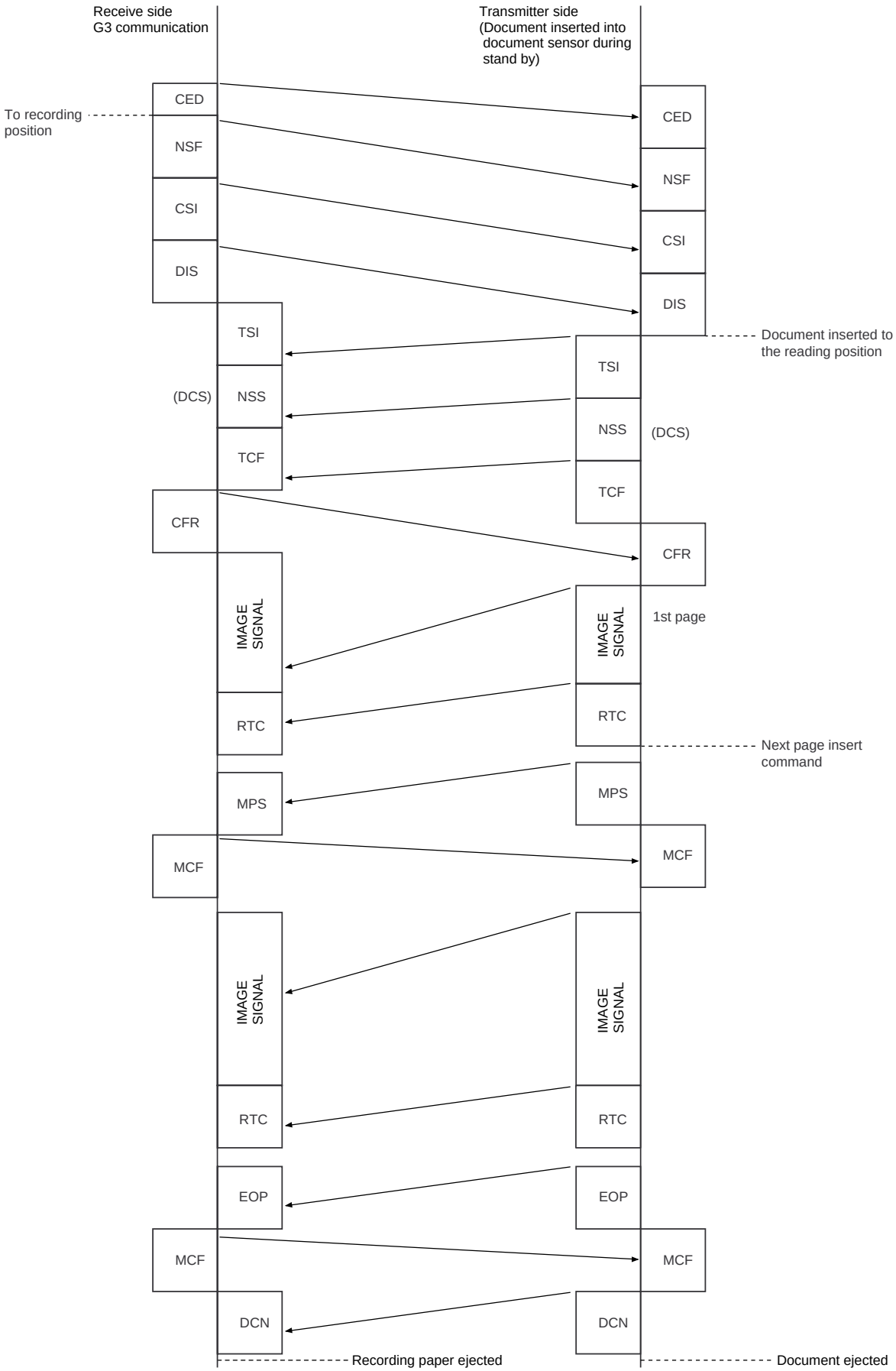


Memory PWB parts layout (Bottom side)

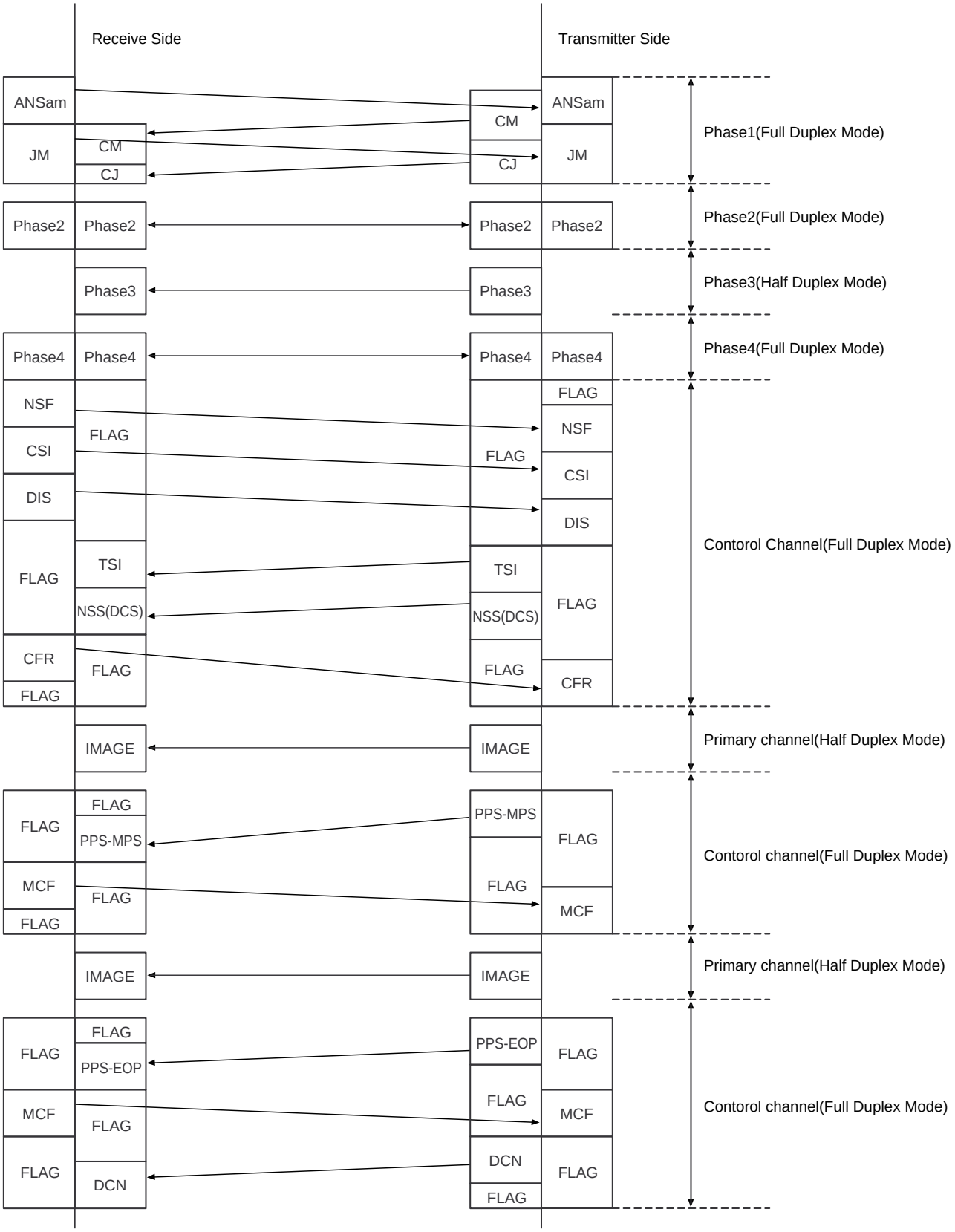


CHAPTER 7. OPERATION FLOWCHART

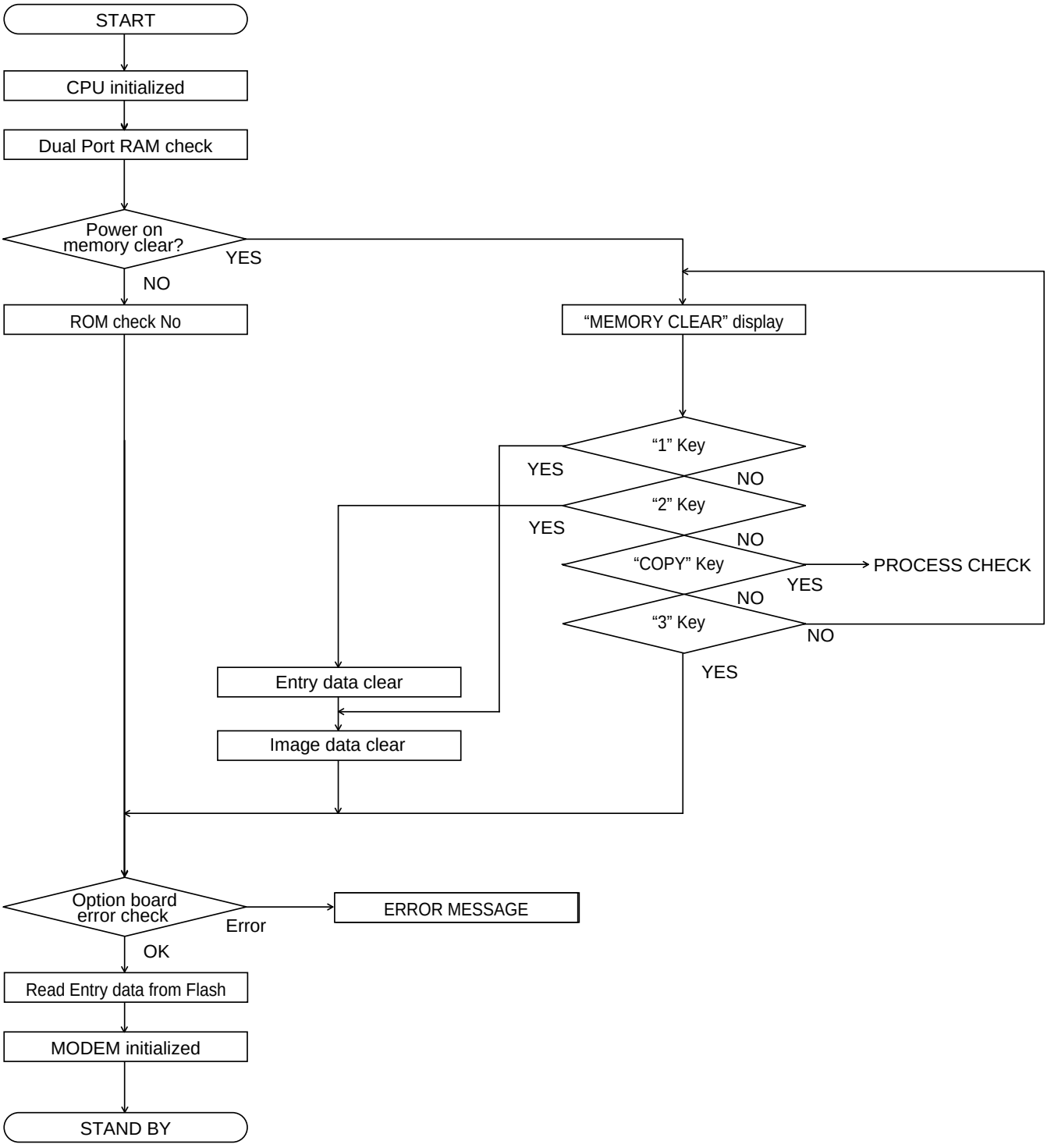
[1] G3 Protocol



[2] Super G3 Protocol



[3] Power On Sequence



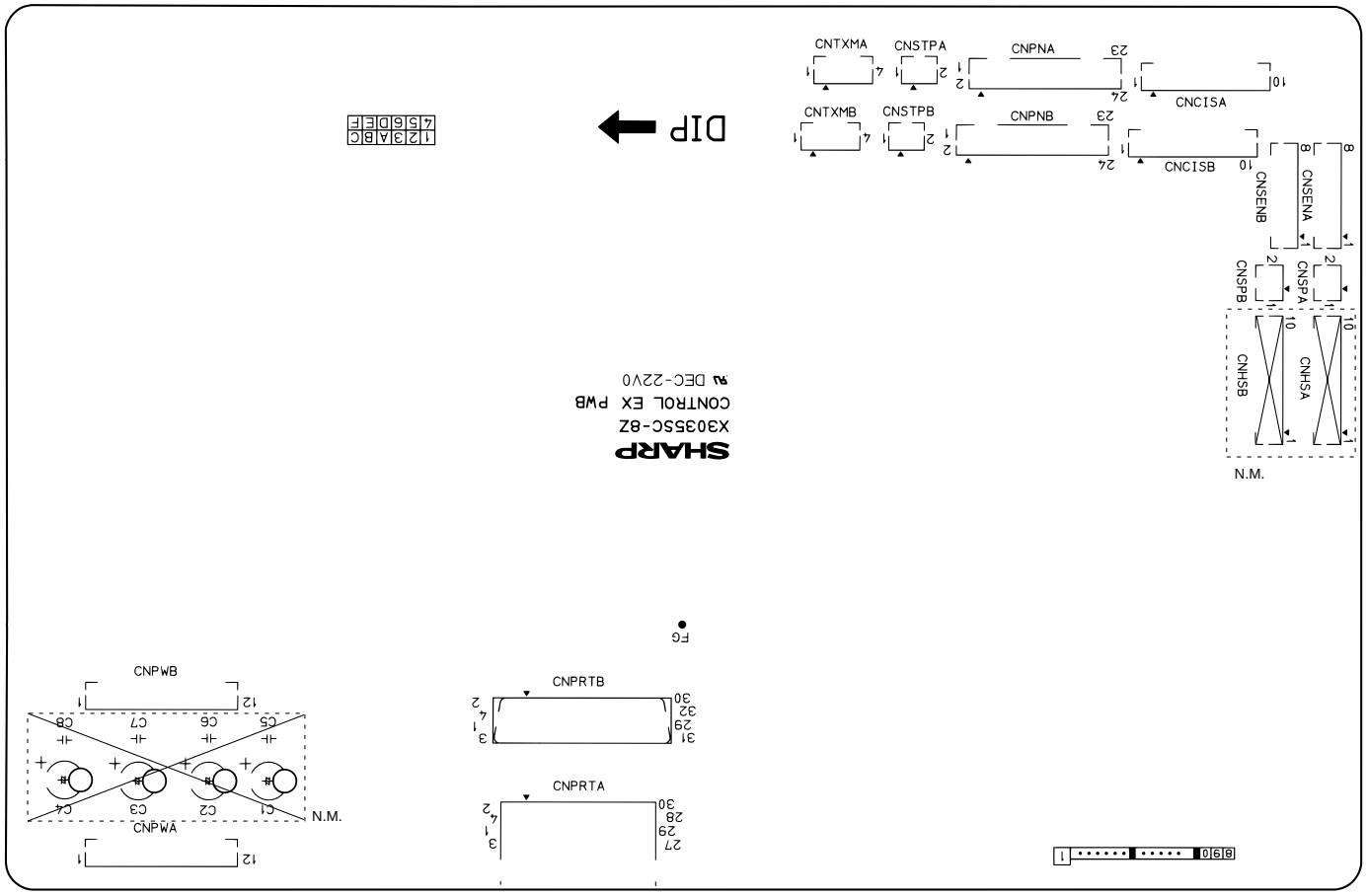
CHAPTER 8. OTHERS

[1] Service Tools

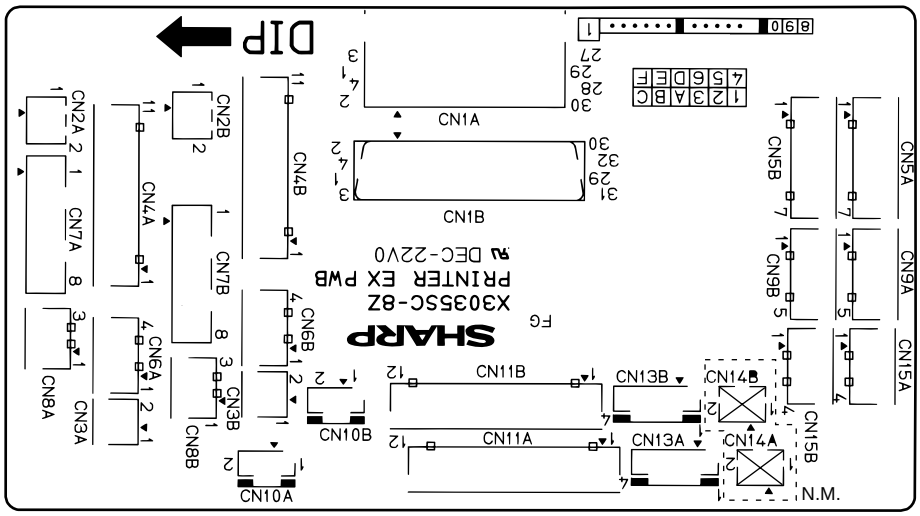
1. List

NO.	PARTS CODE	DESCRIPTION	Q'TY	PRICE RANK
1	CPWBX3035SC01	Extension board unit (Control-EX) / (Printer-EX) and cables	1	CL

CONTROL EXTENSION BOARD



PRINTER EXTENSION BOARD



2. Description

2-1. Extension Board Unit

[For inspection of Main Control PWB, LIU PWB 1]

1) Remove the Rear Cabinet and Sub PWB Plate from the unit, and remove the Check Main Control PWB and Check LIU PWB 1.

2) Mount the Extension Board (Control-EX) in the place where the Main Control PWB has been removed. At that time, the connector (CNPRT) of Extension Board (Control-EX) must be inserted into the Printer PWB.
Connect the cables from the unit to the connectors (A side) (CNTXMA, CNCISA, CNSPA, CNSENA, CNSTPA, CNPNA, CNPWA) of Extension Board (Control-EX) .

3) Connect the Extension Cables to the connectors (B side) of Extension Board (Control-EX) as shown in Fig. 1.

4) The connector (CN1A) of the Extension Board (Printer-EX) must be inserted into the connector (CNPRT) of the Check Main Control PWB.

5) Connect the Extension PWB Cable (QCNW-4559SCZZ) to the connector (CNPRTB) of Extension Board (Control-EX) and the connector (CN1B) of Extension Board (Printer-EX).

6) Connect the LIU Cable to connector (CNLIU1) of Main Control PWB and the connector (CNLIU) of LIU PWB 1.

7) Connect the Extension Cables (7 types except Extension Cable) pulled out from the unit to the Check Main Control PWB. (CNTXM, CNCIS, CNSP, CNSEN, CNSTP, CNPN, CNPW)

Ref No.	Cable parts code	Description
CNPRT	QCNW – 4559SCZZ	EX. Cable, 32-32 PIN
CNTXM	QCNW – 4973SCZZ	EX. Cable, 4-4 PIN
CNCIS	QCNW – 4974SCZZ	EX. Cable, 10-10 PIN
CNSP	QCNW – 4976SCZZ	EX. Cable, 2-2 PIN
CNSEN	QCNW – 4977SCZZ	EX. Cable, 8-8 PIN
CNSTP	QCNW – 4978SCZZ	EX. Cable, 2-2 PIN
CNPN	QCNW – 4979SCZZ	EX. Cable, 24-24 PIN
CNPW	QCNW – 4980SCZZ	EX. Cable,12-12 PIN

Extension Board Connection Diagram

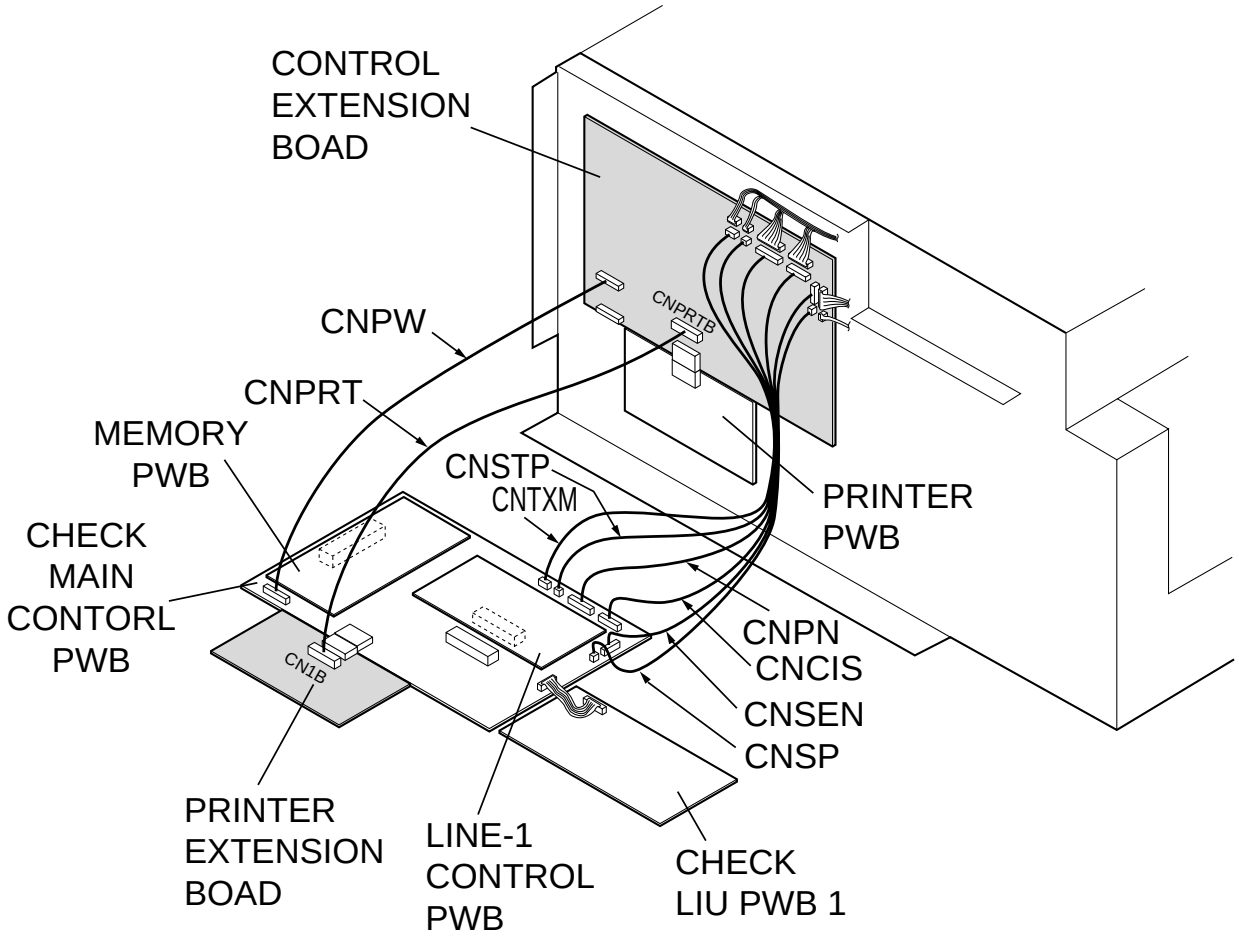


Fig. 1

[For inspection of Printer PWB]

1) Remove the Rear Cabinet and Sub PWB Plate from the unit, and remove the Printer PWB .

2) Mount the Extension Board (Printer-EX) in the place where the Printer PWB has been removed. At that time, the connector (CN1A) of Extension Board (Printer-EX) must be inserted into the connector (CNPRT) of Main Control PWB.
   Connect the cables from the unit to the connectors (A side) (CN2A, CN3A, CN4A, CN5A, CN6A, CN7A, CN8A, CN9A, CN10A, CN13A, CN15A) of Extension Board (Printer-EX).
   Connect the Extension Tray Paper Size Cable (QCNW-4992SCZZ) to the connector (CN14) of the Check Printer PWB and cable from the unit.

3) Connect the Extension Cables to the connectors (B side) of Extension Board (Printer-EX) as shown in Fig 2.

4) Connect the Extension PWB Cable (QCNW-4559SCZZ) to the connector (CNPRTB) of Extension Board (Control-EX) and the connector (CN1B) of Extension Board (Printer-EX).

5) Connect the Extension Cables pulled out from the unit to the Check Printer PWB. (CN2, CN3, CN4, CN5, CN6, CN7, CN8, CN9, CN10, CN13, CN15)

Ref No.	Cable parts code	Description
CNPRT	QCNW – 4559SCZZ	EX. Cable, 32-32 PIN
CN2	QCNW – 4981SCZZ	EX. Cable, 2-2 PIN
CN3	QCNW – 4982SCZZ	EX. Cable, 2-2 PIN
CN4	QCNW – 4983SCZZ	EX. Cable, 11-11 PIN
CN5	QCNW – 4984SCZZ	EX. Cable, 7-7 PIN
CN6	QCNW – 4985SCZZ	EX. Cable, 4-4 PIN
CN7	QCNW – 4986SCZZ	EX. Cable, 8-8 PIN
CN8	QCNW – 4987SCZZ	EX. Cable, 3-3 PIN
CN9	QCNW – 4988SCZZ	EX. Cable, 5-5 PIN
CN10	QCNW – 4989SCZZ	EX. Cable, 2-2 PIN
CN13	QCNW – 4991SCZZ	EX. Cable, 4-4 PIN
CN14	QCNW – 4992SCZZ	EX. Cable, 4-4 PIN
CN15	QCNW – 4993SCZZ	EX. Cable, 4-4 PIN

Extension Board Connection Diagram

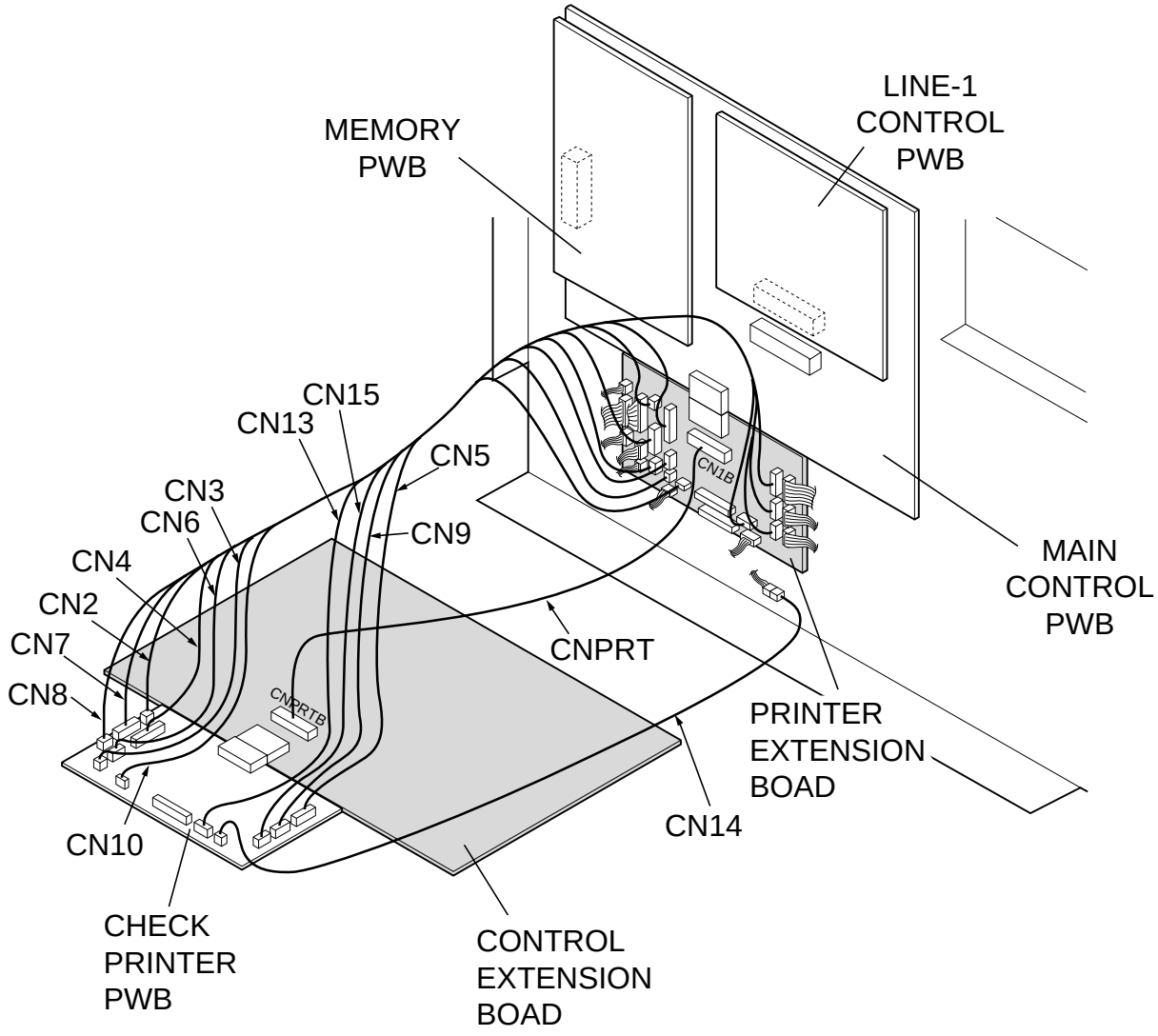


Fig. 2

[For inspection of 2nd. Cassette PWB]

1) Connect all cables to the connectors of Extension Boards and Check PWB as shown in Fig.2 on page 8-3.
2) Connect the cable from the 2nd. cassette to the connector (CN11A) of the Extension Board (Printer-EX).
3) Connect Extension Transport Cable (QCNW-4990SCZZ) to CN11B of the Extension Board (Printer-EX) and CN11 of the Check Printer PWB.

Ref No.	Cable parts code	Description
CN11	QCNW – 4990SCZZ	EX. Cable, 13-13 PIN

Extension Board Connection Diagram

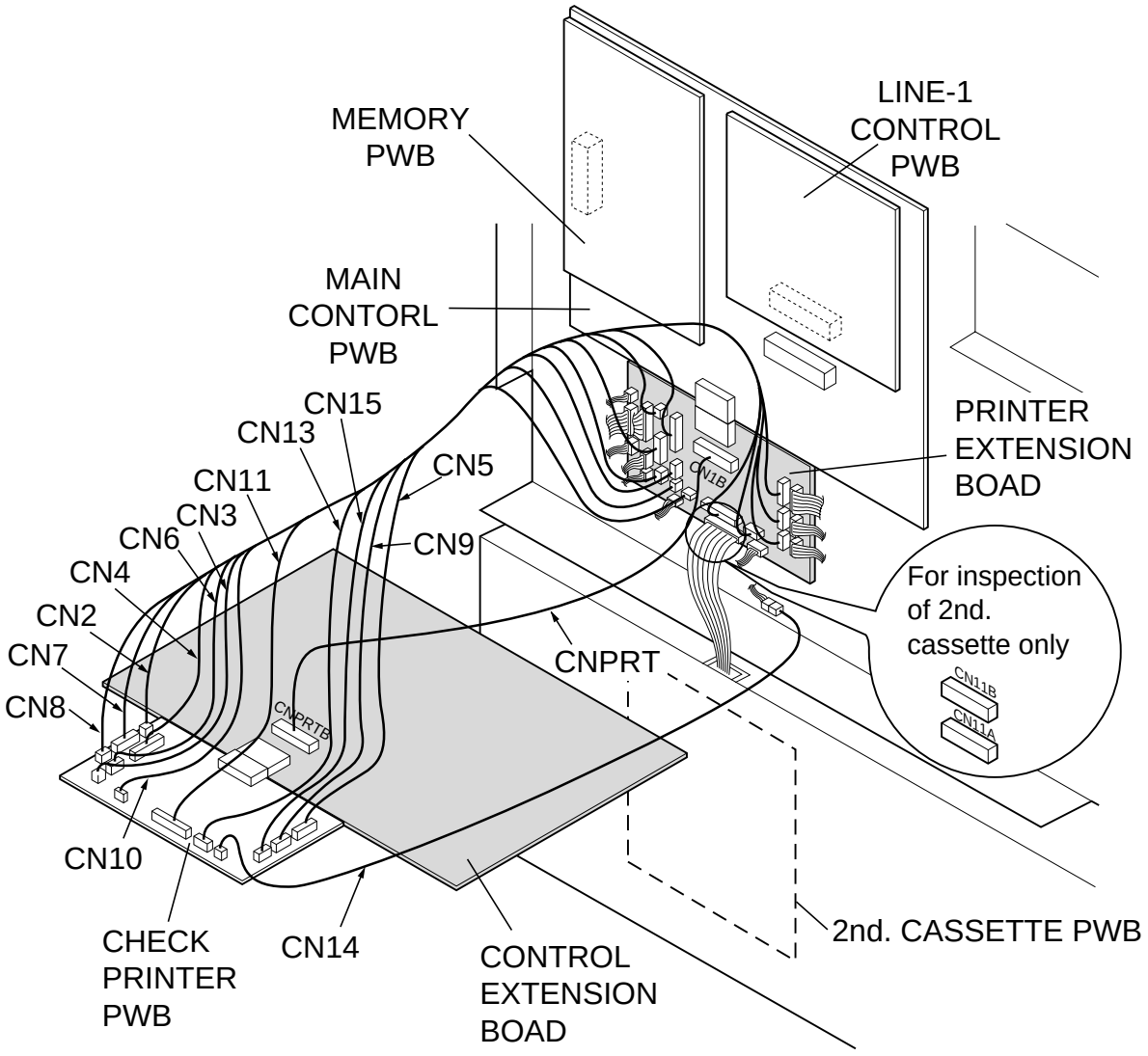


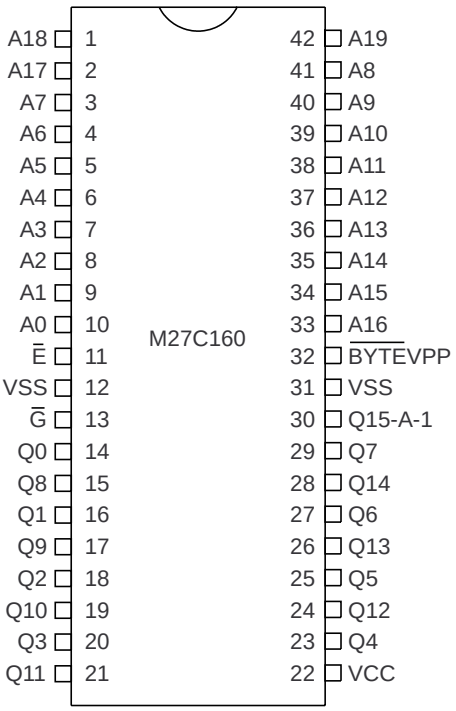
Fig. 3

NO.	PARTS CODE	DESCRIPTION	REF NO.	Q'TY	PRICE RANK
1	QCNCM2525SC3J	CONNECTOR 30pin , BLACK	CNPRTA	1	AH
2	QCNCM2524SC3B	CONNECTOR 32pin , BLACK	CNPRTB	1	AP
3	QCNCM7014SC0D	CONNECTOR 4pin , WHITE	CNTXMA, CNTXMB	2	AB
4	QCNCM7014SC1J	CONNECTOR 10pin , WHITE	CNCISA, CNCISB	2	AC
5	QCNCM2401SC0B	CONNECTOR 2pin , RED	CNSPA, CNSPB	2	AA
6	QCNCM7014SC0H	CONNECTOR 8pin , WHITE	CNSENA, CNSENB	2	AB
7	QCNCM7014SC0B	CONNECTOR 2pin , WHITE	CNSTPA, CNSTPB	2	AD
8	QCNCM2482SC2D	CONNECTOR 24pin , WHITE	CNPNA, CNPNB	2	AB
9	QCNCM7014SC1B	CONNECTOR 12pin , WHITE	CNPWA, CNPWB	2	AD
10	QCNCW2527SC3J	CONNECTOR 30pin , BLACK	CN1A	1	AM
11	QCNCM2524SC3B	CONNECTOR 32pin , BLACK	CN1B	1	AP
12	QCNCM2484SC0B	CONNECTOR 2pin , BLACK	CN2A, CN2B	2	AB
13	QCNCM2584SC0B	CONNECTOR 2pin , WHITE	CN3A, CN3B	2	AC
14	QCNCM2584SC1A	CONNECTOR 11pin , WHITE	CN4A, CN4B	2	AG
15	QCNCM2584SC0G	CONNECTOR 7pin , WHITE	CN5A, CN5B	2	AE
16	QCNCM2584SC0D	CONNECTOR 4pin , WHITE	CN6A, CN6B	2	AD
17	QCNCM2484SC0H	CONNECTOR 8pin , BLACK	CN7A, CN7B	2	AD
18	QCNCM2584SC0C	CONNECTOR 3pin , WHITE	CN8A, CN8B	2	AC
19	QCNCM2584SC0E	CONNECTOR 5pin , WHITE	CN9A, CN9B	2	AD
20	QCNCM2498SC0B	CONNECTOR 2pin , WHITE	CN10A, CN10B	2	AB
21	QCNCM2584SC1C	CONNECTOR 13pin , WHITE	CN11A, CN11B	2	AG
22	QCNCM2498SC0D	CONNECTOR 4pin , WHITE	CN13A, CN13B	2	AD
23	QCNCM2585SC0D	CONNECTOR 4pin , BLUE	CN15A, CN15B	2	AD
24	QCNW–4559SCZZ	PWB CABLE 32-32pin	CNPRT	1	BA
25	QCNW–4973SCZZ	TX MOTOR CABLE 4-4pin	CNTXM	1	AH
26	QCNW–4974SCZZ	CIS SENSOR CABLE 10-10pin	CNCIS	1	AP
27	QCNW–4976SCZZ	SPEAKER CABLE 2-2pin	CNSP	1	AF
28	QCNW–4977SCZZ	PAPER SENSOR CABLE 8-8pin	CNSEN	1	AN
29	QCNW–4978SCZZ	VERIFICATION STAMP CABLE 2-2pin	CNSTP	1	AF
30	QCNW–4979SCZZ	OPERATION PANEL CABLE 24-24pin	CNPN	1	AV
31	QCNW–4980SCZZ	POWER SUPPLY CABLE 12-12pin	CNPW	1	AQ
32	QCNW–4981SCZZ	TH1 THERMISTOR PWB CABLE 2-2pin	CN2	1	AF
33	QCNW–4982SCZZ	TRAY PAPER TAKE-UP SOLENOID CABLE 2-2pin	CN3	1	AF
34	QCNW–4983SCZZ	HIGH VOLTAGE PWB UNIT CABLE 11-11pin	CN4	1	AP
35	QCNW–4984SCZZ	LASER DIODE DRIVE PWB CABLE 7-7pin	CN5	1	AL
36	QCNW–4985SCZZ	PRINT MOTOR CABLE 4-4pin	CN6	1	AH
37	QCNW–4986SCZZ	MECHA PS CABLE 8-8pin	CN7	1	AN
38	QCNW–4987SCZZ	PS3 PAPER EXIT SENSOR CABLE 3-3pin	CN8	1	AG
39	QCNW–4988SCZZ	POLYGON MOTOR CABLE 5-5pin	CN9	1	AK
40	QCNW–4989SCZZ	PS1 PAPER TAKE-UP SENSOR CABLE 2-2pin	CN10	1	AF
41	QCNW–4990SCZZ	TRANSPORT PWB CABLE 13-13pin	CN11	1	AQ
42	QCNW–4991SCZZ	PS4 PAPER OUT SENSOR & TRAY EMPTY SENSOR CABLE 4-4pin	CN13	1	AH
43	QCNW–4992SCZZ	TRAY PAPER SIZE SENSOR CABLE 4-4pin	CN14	1	AN
44	QCNW–4993SCZZ	TONER EMPTY SENSOR CABLE 4-4pin	CN15	1	AH
45	QCNW–4994SCZZ	ARG CABLE 1-1pin	FG	1	AD

[2] IC Signal Names

MAIN CONTROL PWB UNIT

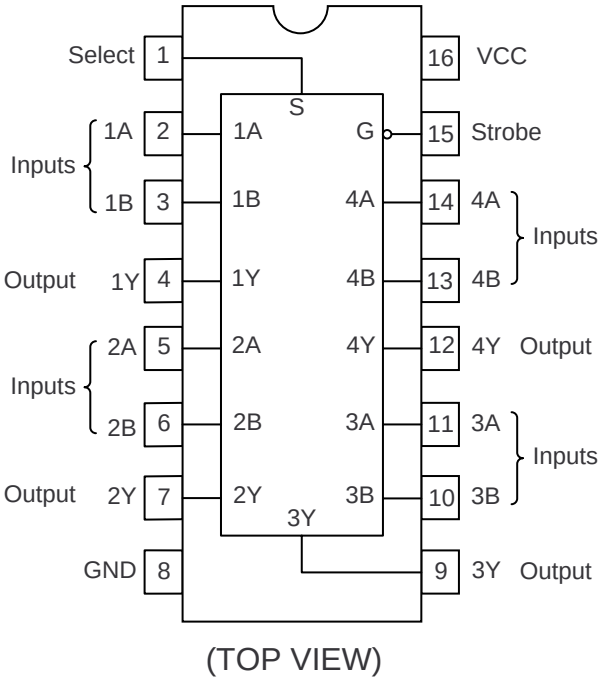
IC2: VHiM27C16010F(M27C160-100F1)



Signal names

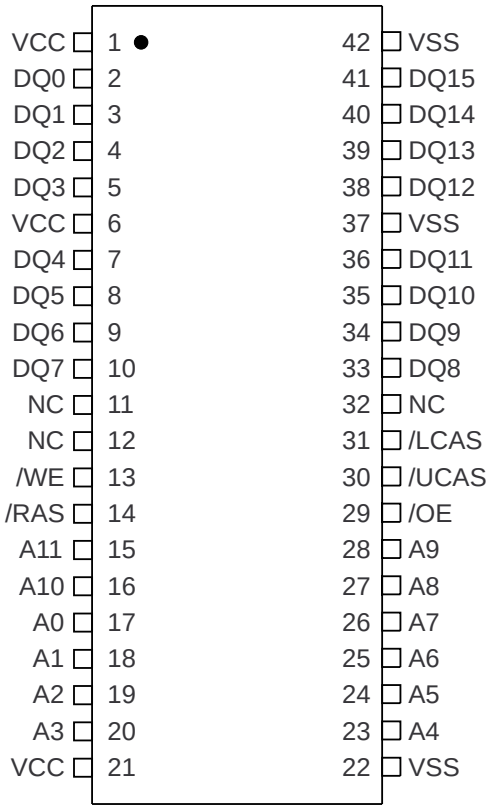
Name	Function
A0~A19	Address Inputs
Q0~Q7	Data Outputs
Q8~Q14	Data Outputs
Q15A-1	Data Output/Address Input
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
$\overline{BYTE}$VPP	Byte Mode/Program Supply
VCC	Supply Voltage
VSS	Ground

IC36:VHiHD74HC157F(74HC157)

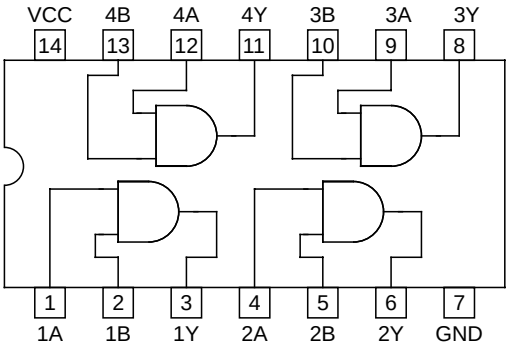


(TOP VIEW)

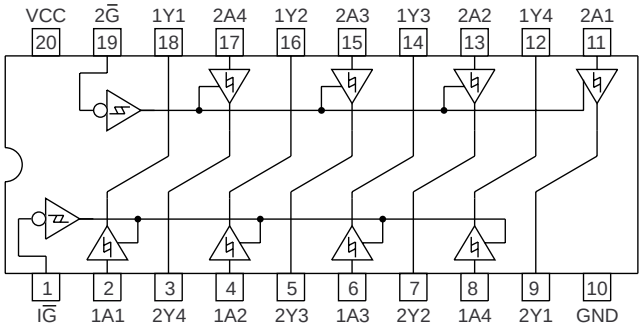
IC13, IC23:VHi1M16E//J-6 (HY5118164 or MSM5118165)



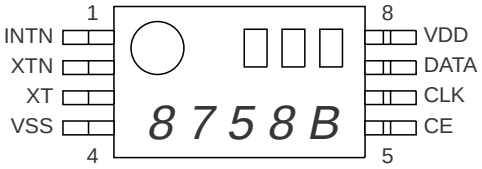
IC37: VHiHD74LV08T1(74LV08A)



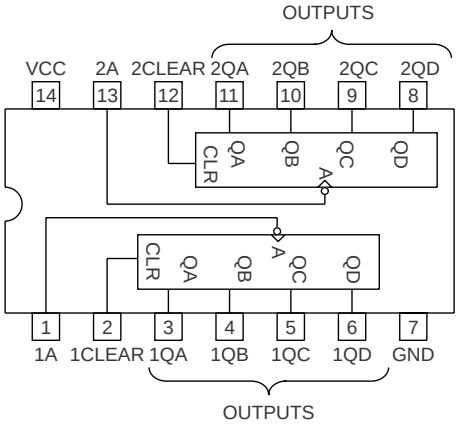
IC20: VHiHD74LS244F(HD74LS244)



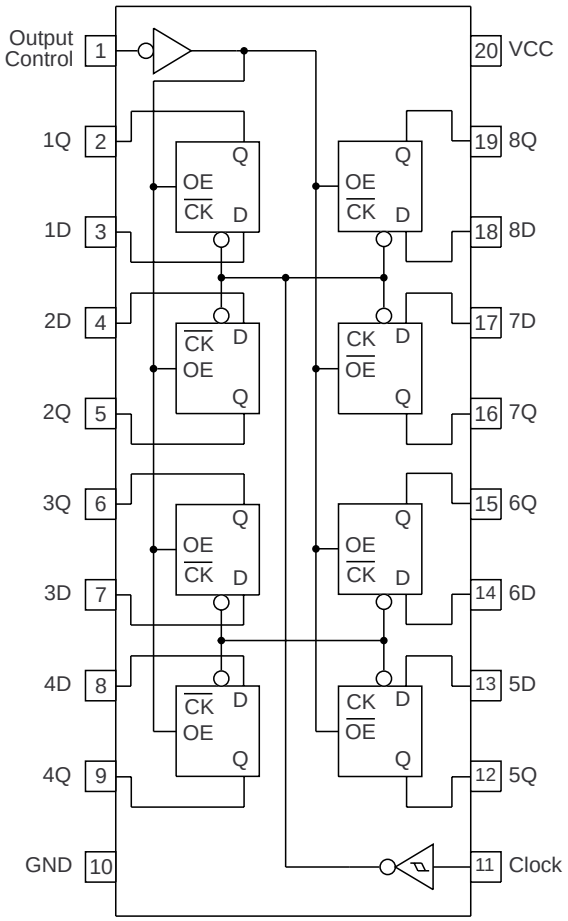
IC1: VHiSM8578BV-1(SM8578BV)



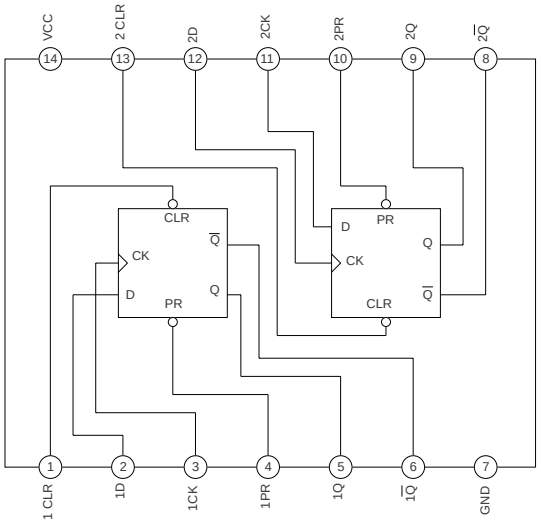
IC33: VHi74VHC393FT(74VHC393)



IC14: VHiHD74LS374F(HD74LS374)



IC35: VHiHD74HC74FM(74HC74)

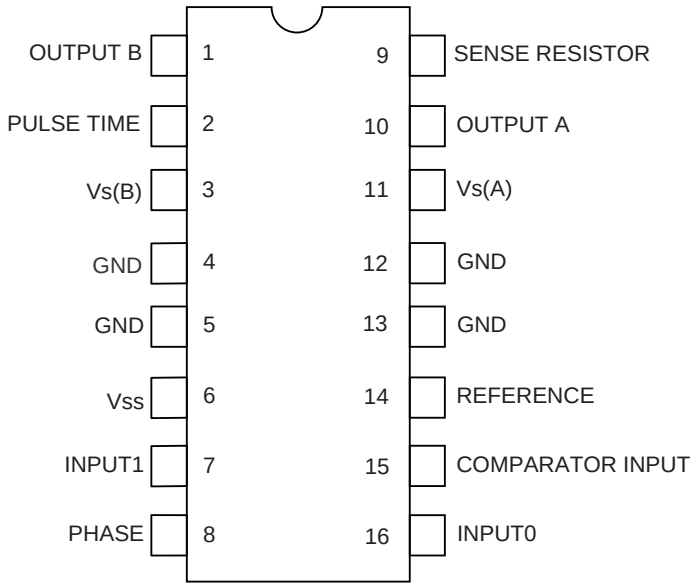


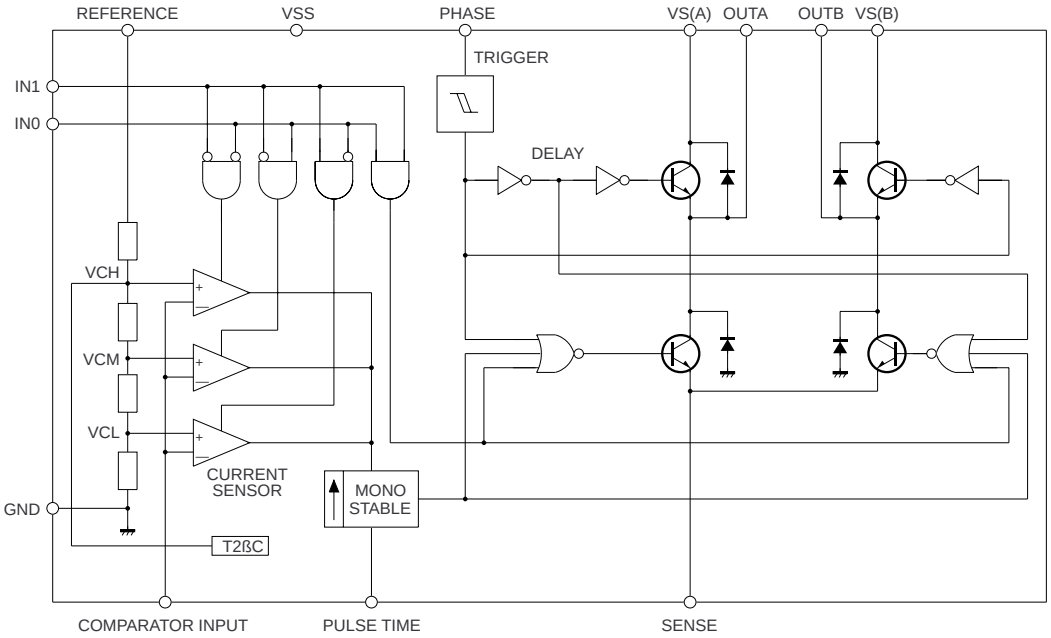
INPUT				OUTPUT	
$\overline{PR}$	$\overline{R}$	CLK	D	Q	$\overline{Q}$
L	H	X	X	H	Q
H	L	X	X	L	L
L	L	X	X	H*	H*
H	H	↑	H	H	L
H	H	↑	L	L	H
H	H	↓	X	NO Change	

H:High L:Low X:H or L

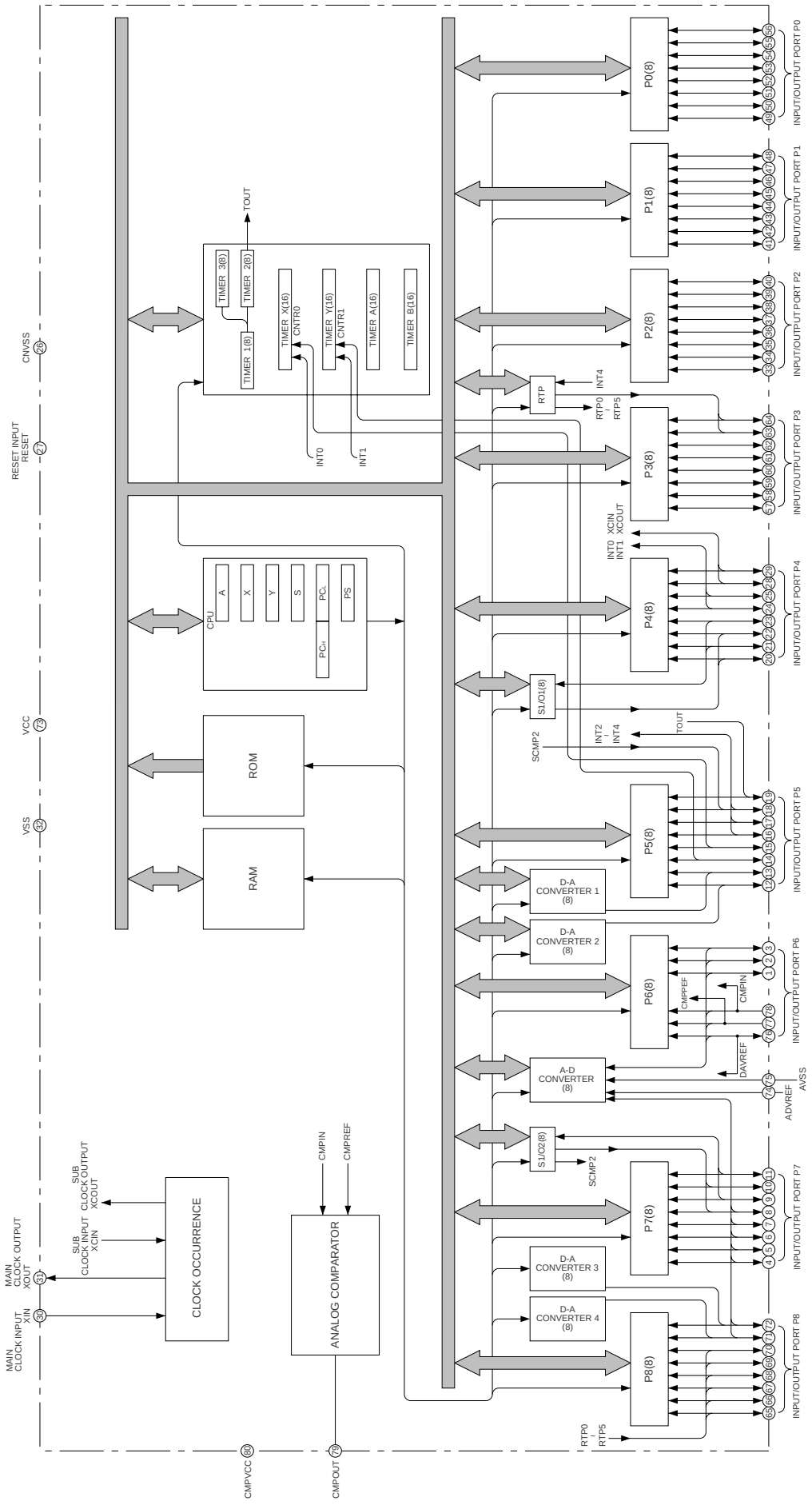
PRINTER PWB UNIT

IC1, IC4: VHiTEA3718SDP(TEA3718SDP)





IC2: RH-IX2162XHZZ(M38073E4FP)



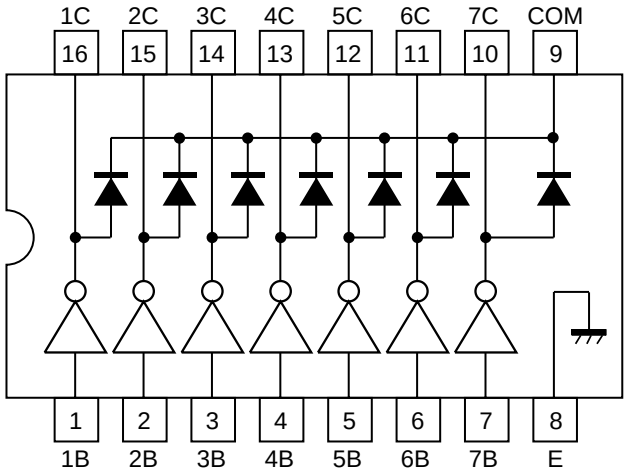
Terminal description

Terminal name	Name	Function	Function except for the port
VCC, VSS	Power supply input	VCC 2.7V~5.5V, VSS 0V input.	
CMPVCC	Analog comparator power supply input	Power supply input terminal of analog comparator.	
CNVSS	CNVss	It is the terminal which controls the movement mode of the chip. Connect this terminal to VSS. When it is connected to VCC, the internal ROM is prohibited, and it accesses the external memory.	
ADVREF	Standard voltage input	Standard voltage input terminal of A–D converter.	
AVSS	Analog power supply input	Power supply input terminal of A–D converter, D-A converter and analog comparator. Connect this terminal to VSS.	
CMPOUT	Analog comparator output	Output terminal of analog comparator.	
$\overline{\text{RESET}}$	Reset input	Reset input terminal of active “ L ”.	
XIN	Clock input	Input/output terminal of clock occurrence circuit. Ceramic oscillator or crystal oscillator is connected between XIN and XOUT. When using the external clock, connect clock oscillator to XIN and XOUT is open.	
XOUT	Clock output		
P00 ~ P07	Input/output port P0	8bit input/output port. Input and output can be specified in the bit unit by program. Pull up control is possible. It functions as address bus and date bus when the external memory is connected. Output form is SMOS 3 state in the CMOS input level. Port P2 is possible to switch CMOS/TTL input level.	
P10 ~ P17	Input/output port P1		
P20 ~ P27	Input/output port P2		
P30/RTP6, P31/RTP7	Input/output port P3	8bit input/output port. Input/output can be specifiled in the bit unit by program. It functions as a control bus when the external memory is connected. Output form is SMOS 3 state in the CMOS input level. Port P32 is possible to switch CMOS/TTL input level.	Real time port function terminal
P34/CKOUT			Clock output function terminal
P32,P33, P35 ~ P37			
P40/XCOUT, P41/XCIN	input/output port P4	8bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	Sub clock occurrence input/ output terminal (Oscillator is connected)
P42/INT0 P43/INT1			Interruption input terminal Timer X, timer Y function terminal (INT0,INT1)
P44/RXD, P45/TXD, P46/SCLK1, P47/$\overline{\text{SRDY1}}$,			Function terminal of serial I/ 01.
P50/TOUT	Input/output port5	8bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	Timer 2, output terminal
P51/ SCMP2/ INT2			Interruption input terminal Serial I/02 function terminal
P52/INT3, P53/INT4			Interruption input terminal Real time port function terminal (INT4)
P54/CNTR0 P55/CNTR1			Timer X, timer Y function terminal

Terminal description

Terminal name	Name	Function	Function except for the port
P56/DA1, P57/DA2	Input/output port P5	8bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	D-A converter output terminal
P60/AN5~ P62/AN7	Input/output port P6	3bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	A-D converter input terminal
P63/CMPIN/ AN8	Input port P6	2bit input port which is CMOS input level.	Input terminal of analog comparator A-D converter input terminal
P64/CMPREF /AN9			Standard voltage input terminal of analog comparator A-D converter input terminal
P65/DAVREF /AN10	Input/output port P6	1bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	D-A converter power supply input terminal A-D converter input terminal
P70/SIN2 P71/SOUT2 P72/SCLK2	Input/output port P7	8bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	Serial I/02 function terminal
P73/$\overline{\text{SRDY2}}$ /ADT/AN0			Serial I/02 function terminal A-D converter input terminal A-D trigger input terminal
P74/AN1~ P77/AN4			A-D converter input terminal
P80/DA3 /AN11, P81/DA4 /AN12	Input/output port P8	8bit input/output port which has the similar function of P0. Output form is CMOS3 state in the CMOS input level.	D-A converter output terminal A-D converter input terminal
P82/RTP0~ P87/RTP5			Real time port function terminal

IC3: VHiULN2003ADR(ULN2003A)



SHARP PARTS GUIDE

MODEL FO-6700

MODEL FO-67DL

SELECTION CODE	DESTINATION
U	U.S.A.

CONTENTS

1 Exterior, etc. (1)

2 Exterior, etc. (2)

3 Exterior, etc. (3)

4 Operation Panel Unit

5 Document Guide Upper Unit

6 Drive Unit

7 Scanner Frame Unit

8 Frames

9 Paper Take-up Section

10 Fusing Unit

11 Drive/Transfer Section

12 2nd. Cassette (1)

13 2nd. Cassette (2)

14 3rd. Cassette (1)

15 3rd. Cassette (2)

16 Packing Material & Accessories (FO-6700U)

17 Packing Material & Accessories (OPTION:FO-67DL)

18 Main Control PWB Unit

19 Line-1 Control PWB Unit (FO-6700U)
Line-2 Control PWB Unit (OPTION:FO-67DL)

20 LIU PWB 1 Unit (FO-6700U)
LIU PWB 2 Unit (OPTION:FO-67DL)

21 Printer PWB Unit

22 Power Supply PWB Unit

23 Operation Panel PWB Unit

24 High Voltage PWB Unit

25 Toner Empty PWB Unit

26 2nd. Cassette PWB Unit

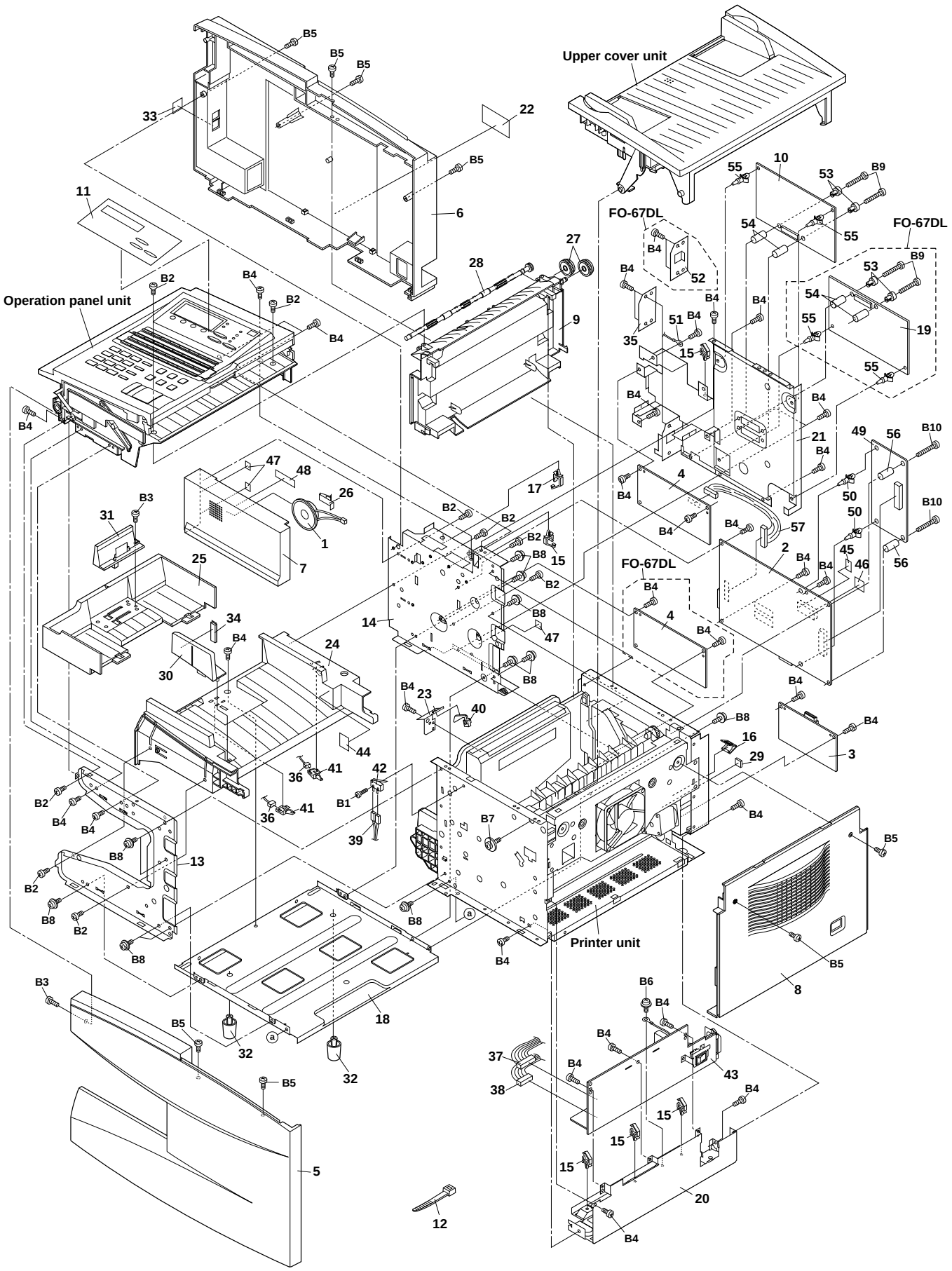
27 3rd. Cassette PWB Unit

28 Memory PWB Unit

■ Index

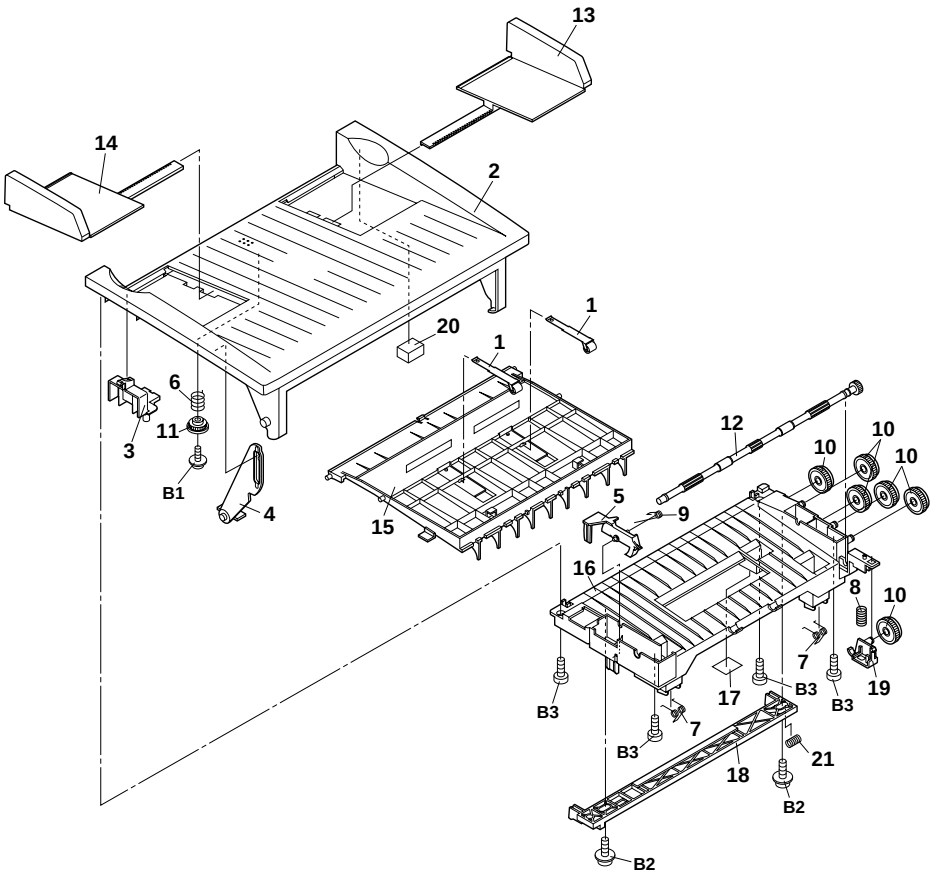
Because parts marked with "⚠" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specified in the product specification.

[1] Exterior etc.(1)

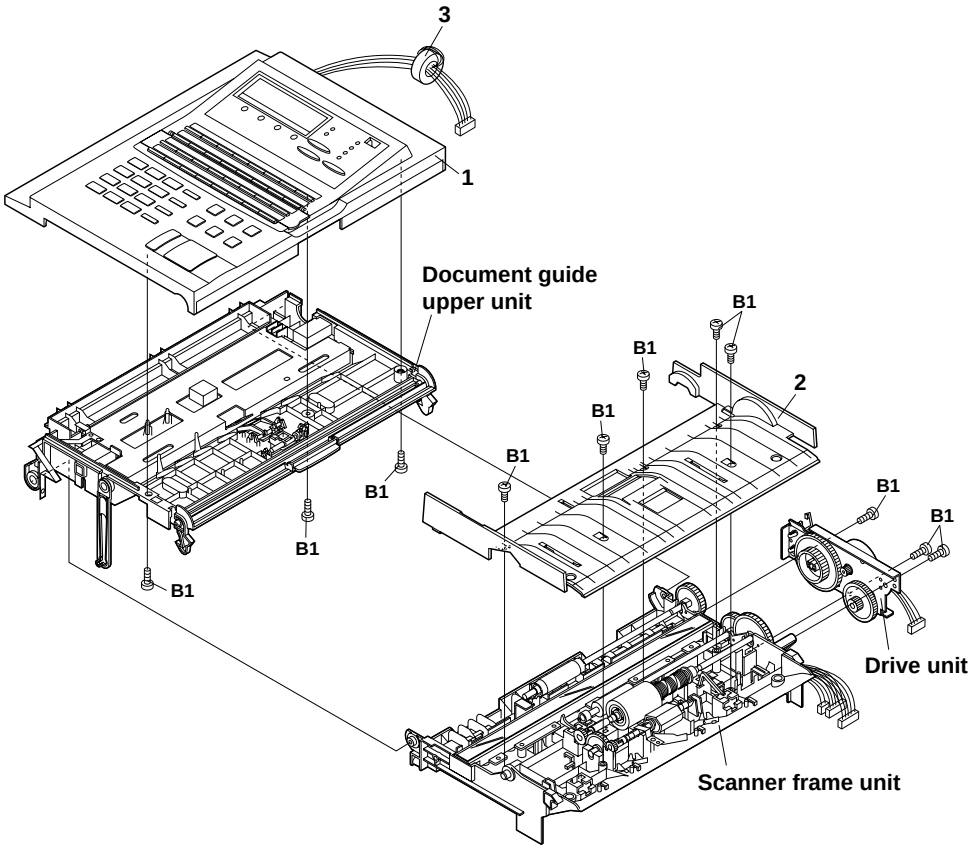


NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[1] Exterior etc.(1)						
1	CCNW-4955XH01	AG		C	Speaker ass'y	
2	DCEKC185PXHZZ	CG	N	E	Control PWB unit(Within ROM)	
3	DCEKC470BXH02	BR		E	Printer PWB unit	
4	DCEKL471BXH02	BH	N	E	LIU PWB 1 unit(FO-6700U),LIU PWB 2 unit(FO-67DL)	
5	GCABA2327XHSF	AY	N	D	Front cabinet	
6	GCABB2371XHSA	BA	N	D	Rear cabinet	
7	GCABC2329XHSA	AG		D	Inner front cabinet	
8	GCABD2330XHSA	AL		D	Right cabinet	
9	GCABE2331XHSA	AK		C	Left cabinet	
10	DCEKC186PXH01	CE	N	E	Line-1 control PWB unit(Within ROM)	[FO-6700U]
11	HPNLC2403XHSA	AM	N	C	Decoration panel	
12	LBNDJ2006XHZZ	AA		C	Band(100mm)	
13	LFRM-2202XHZZ	AP		C	Left front frame	
14	LFRM-2203XHZZ	AQ		C	Left rear frame	
15	LHLDW2158SCZZ	AC		C	Wire holder	
16	LHLDW2182SCZZ	AC		C	Edge holder	
17	LHLDW2183SCZZ	AD		C	Wire holder	
18	LPLTM3014XHZZ	AS		C	Left bottom frame	
19	DCEKC186PXH02	CE	N	E	Line-2 control PWB unit(Within ROM)	[FO-67DL]
20	LPLTM3018XHZZ	AN		C	Power supply bracket	
21	LPLTM3128XHZZ	AX	N	C	Sub PWB plate	
22	TLABS213CXHTZ	AD	N	D	FDA label	
23	LPLTM3037XHZZ	AD		C	PS4 bracket	
24	LPLTP3016XHSA	AN		C	Paper feed tray	
25	LPLTP3017XHSA	AH		C	Extension paper feed tray	
26	MSPRP3055XHFJ	AD		C	Speaker holder plate spring	
27	NGERH2466XHZZ	AE		C	Idler gear(32Z)	
28	NROLP2420XHZZ	AM		C	Left cabinet roller	
29	PCUSS2122XHZZ	AC		C	PWB cushion	
30	PGIDM2542XHSA	AD		C	Tray width guide	
31	PGIDM2543XHSA	AD		C	Tray back guide	
32	PLEGP2071XHZZ	AE		C	Foot	
33	PSHEZ3410XHZZ	AB		C	Jack sheet	
34	PSPO-2001XHZZ	AD		C	Tray width sponge	
35	LPLTM3111XHZZ	AX	N	C	Jack plate	[FO-6700U]
36	QCNW-4952XHZZ	AF		C	Tray size switch cable	
37	QCNW-4956XHZZ	AK		C	Power supply cable	
38	QCNW-4957XHZZ	AL		C	Mechanism connect power supply cable	
39	QCNW-4960XHZZ	AD		C	Safety switch cable	
40	QSW-M2255SCZZ	AF		C	Paper out sensor	[PS4]
41	QSW-M2296XHZZ	AD		C	Tray cover sensor/Paper size sensor	[PS5A,B]
42	QSW-Z2285SCZZ	AK		C	Interlock switch	[S2]
⚠ 43	RDENT2159XHZZ	BS	N	E	Power supply PWB unit	
44	TLABH262AXHZZ	AE		D	Paper limit label 1	
45	TLABN1235CCZZ	AA		D	EPROM label	
46	TLABP3078SCZZ	AA		D	Shading label	
47	PSHEZ3473XHZZ	AN		C	Sheet A	
48	PSHEZ3474XHZZ	AF		C	Sheet B	
49	DCEKM473BXH05	CA	N	E	Memory PWB	
50	LSTY-0057AFZZ	AC		C	Spacer	
51	QCNW-316AXHZZ	AF		C	Panel earth cable	
52	LPLTM3111XHZA	AX	N	C	Jack plate	[FO-67DL]
53	LBSHP2131XHZZ	AD	N	C	PWB bush	
54	PCAPZ2089XHZZ	AE	N	C	PWB collar	
55	PSPAN2259XHZZ	AE	N	C	PWB spacer	
56	PCAPZ2030XHZZ	AF	N	C	PWB support	
57	QCNW-369AXHZZ	AG	N	C	LIU cable	
B1	XBBSD23P08000	AA		C	Screw(2.3x8)	
B2	XEBSD30P10000	AA		C	Screw(3x10)	
B3	XEBSE30P10000	AA		C	Screw(3x10)	
B4	XHBSD30P06000	AA		C	Screw(3x6)	
B5	XHBSE30P10000	AA		C	Screw(3x10)	
B6	XBPSN40P06K00	AA		C	Screw(4x6)	
B7	LX-BZ2205XHZZ	AC		C	Screw(3x8)	
B8	LX-BZ2241XHZZ	AC		C	Screw(3x6)	
B9	XHBSD30P18000	AA		C	Screw(3x18)	
B10	XHBSD30P25000	AA		C	Screw(3x25)	

[2] Exterior etc.(2)

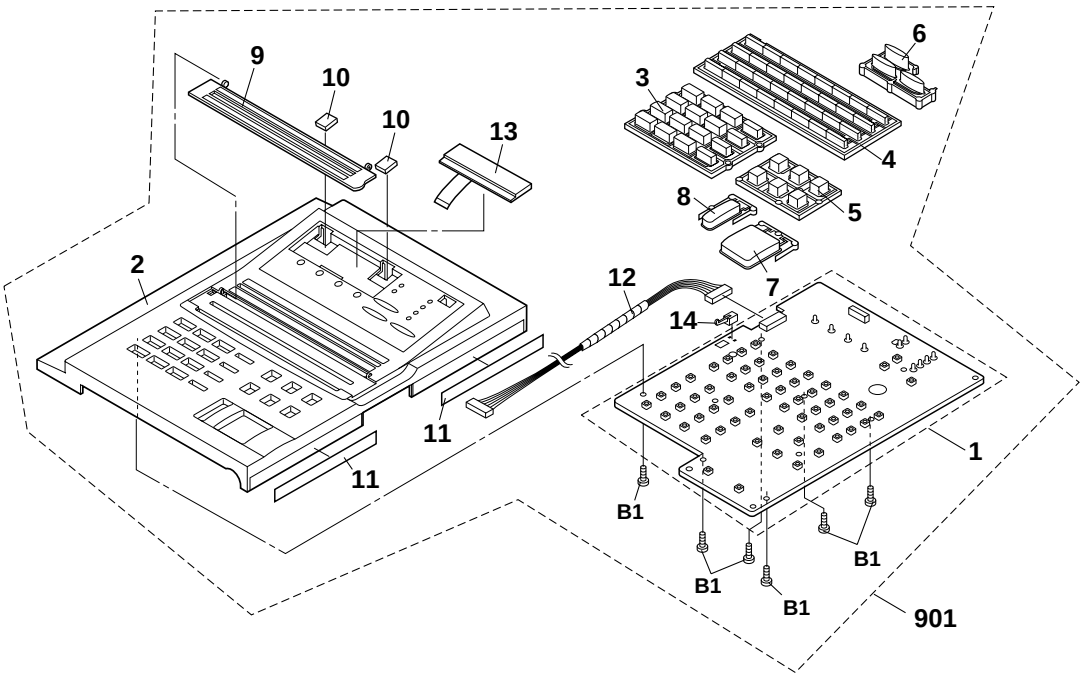


[3] Exterior etc.(3)

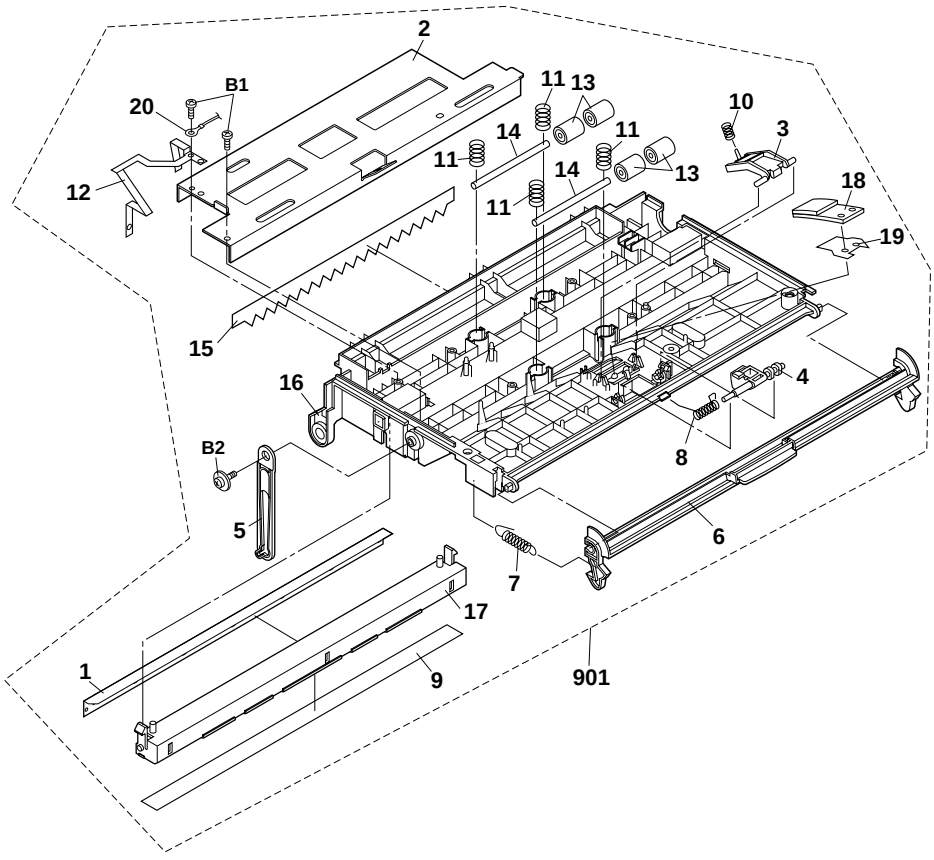


NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[2] Exterior etc.(2)					
1	CROLP2320XH01	AZ		C	Pinch roller ass'y
2	GCOVA2405XHSA	AK		C	Upper cover
3	JBTN-2255XHSA	AD		C	Upper cover lock button
4	LPLTM3019XHZZ	AD		C	Upper cover stopper
5	MLEVP2305XHZZ	AD		C	DRUM detect lever
6	MSPRC3149XHZZ	AB		C	Hopper spring
7	MSPRC3090XHZZ	AH		C	Press spring
8	MSPRC3100XHZZ	AF		C	Gear bracket spring
9	MSPRD3091XHZZ	AF		C	DRUM detect lever spring
10	NGERH2466XHZZ	AE		C	Idler gear(32Z)
11	NGERP2318XHZZ	AD		C	Pinion gear
12	NROLP2421XHZZ	AM		C	Upper cover roller
13	PGIDM2544XHSA	AE		C	Hopper guide,right
14	PGIDM2545XHSA	AC		C	Hopper guide,left
15	PGIDM2546XHZZ	AH		C	Paper exit guide upper
16	PGIDM2547XHZA	AT	N	C	Upper cover guide under
17	PSHEZ3455XHZZ	AF		C	Reflection sheet
18	PTME-2060XHZA	AG	N	C	Upper cover lock nail
19	LPLTM3036XHZZ	AH		C	Upper cover gear bracket
20	PCUSS2127XHZZ	AC		C	Upper cover cushion
21	MSPRC3248XHZZ	AB	N	C	Open and shut spring
B1	LX-BZ2138XHZZ	AB		C	Screw(3x8)
B2	LX-BZ2205XHZZ	AC		C	Screw(3x8)
B3	XEBSD30P10000	AA		C	Screw(3x10)
[3] Exterior etc.(3)					
1	CCASP2107XH68	BS	N	E	Operation panel unit
2	PGIDM2541XHSB	AL		C	Document guide under
⚠ 3	RCORF2125XHZZ	AE		B	Core
B1	XEBSD30P10000	AA		C	Screw(3x10)

[4] Operation Panel Unit

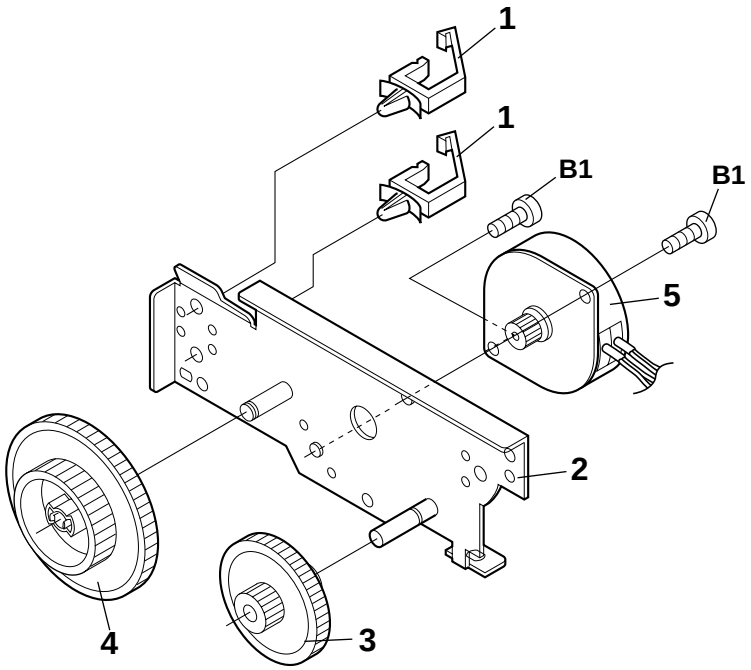


[5] Document Guide Upper Unit

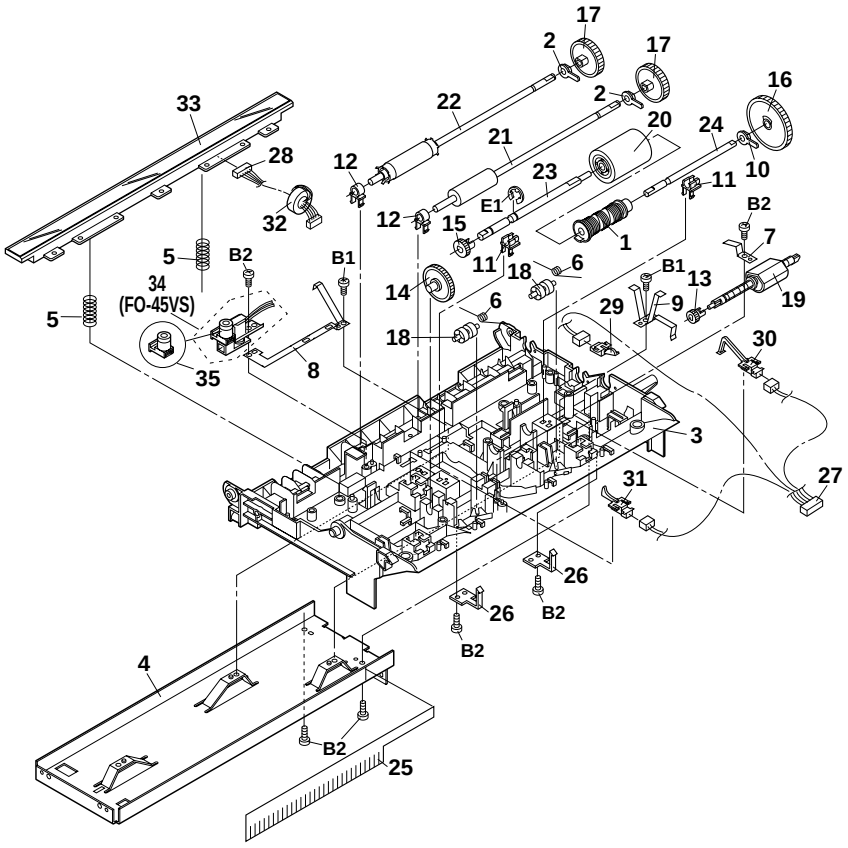


NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[4] Operation Panel Unit					
1	DCEKP496AXH02	BE		E	Operation panel PWB unit
2	GCASP2107XHZJ	AT	N	D	Panel case
3	JBTN-2184XHZZ	AK		C	10 key
4	JBTN-2185XHZZ	AH		C	Direct key
5	JBTN-2187XHZZ	AE		C	Mode key
6	JBTN-2189XHZC	AC		C	Change key
7	JBTN-2253XHSA	AC		C	Start key
8	JBTN-2254XHSA	AC		C	Stop key
9	LPLTP2823XHZZ	AF		C	Page plate
10	PCUSS2097XHZZ	AC		C	LCD cushion
11	PSHEZ3480XHSA	AF		C	Scan wide sheet
12	QCNW-4949XHZZ	AR		C	Panel cable
13	VVLLMG2025TPR	BA		B	LCD
14	QSW-Z2234SCZZ	AE		C	Paper guide switch
B1	XUBSD20P06000	AA		C	Screw(2x6)
	(Unit)				
901	CCASP2107XH68	BS	N	E	Operation panel unit
[5] Document Guide Upper Unit					
1	LANGF2819XHZZ	AF		C	Back bracket
2	LPLTM3011XHZZ	AK		C	Document upper plate
3	LPLTP2819XHZZ	AD		C	Separator plate
4	LPLTP2821XHZZ	AD		C	Transfer piece
5	LSTPP2052XHZZ	AD		C	Document guide stopper
6	MLEVP2304XHSA	AE		C	Release lever
7	MSPRC2843XHZZ	AC		C	Release lever spring
8	MSPRD3179XHZZ	AD		C	Input pressure spring
9	PSHEZ3418XHZZ	AC		C	Back sheet
10	MSPRC3180XHZZ	AD		C	Separate spring
11	MSPRC3126XHZZ	AG		C	Pinch roller spring 2
12	MSPRP3083XHZZ	AF		C	Brush earth spring
13	NROLP2334XHZA	AC		C	Pinch roller
14	NSFTZ2306XHZZ	AD		C	Pinch roller shaft
15	PBRS-2047SCZZ	AG		C	Paper brush
16	PGIDM2539XHZA	AL		C	Document guide upper
17	PGIDM2540XHZZ	AF		C	Back guide
18	PGUMM2162XHZZ	AF		C	Separate gum
19	PSHEZ3419XHZZ	AB		C	Separate sheet
20	QCNW-316AXHZZ	AF		C	Panel earth cable
B1	XEBSD30P10000	AA		C	Screw(3x10)
B2	LX-BZ2205XHZZ	AC		C	Screw(3x8)
	(Unit)				
901	CGIDM2539XH17	AY		E	Document guide upper unit

[6] Drive Unit

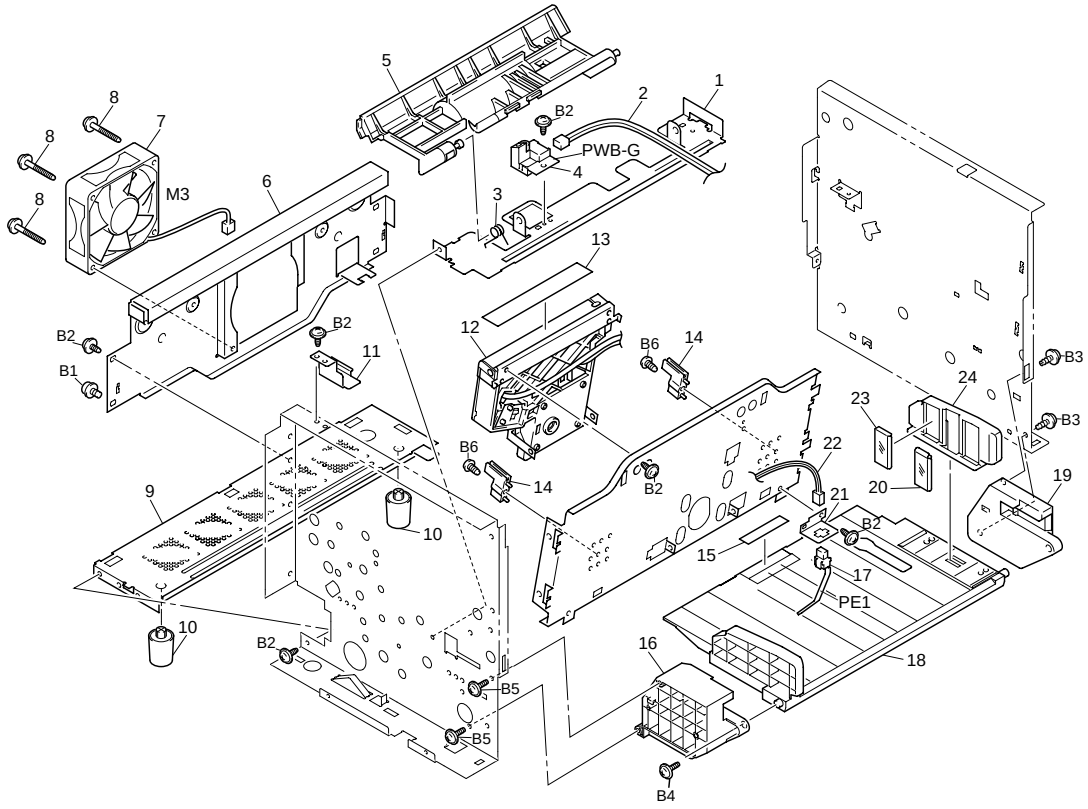


[7] Scanner Frame Unit

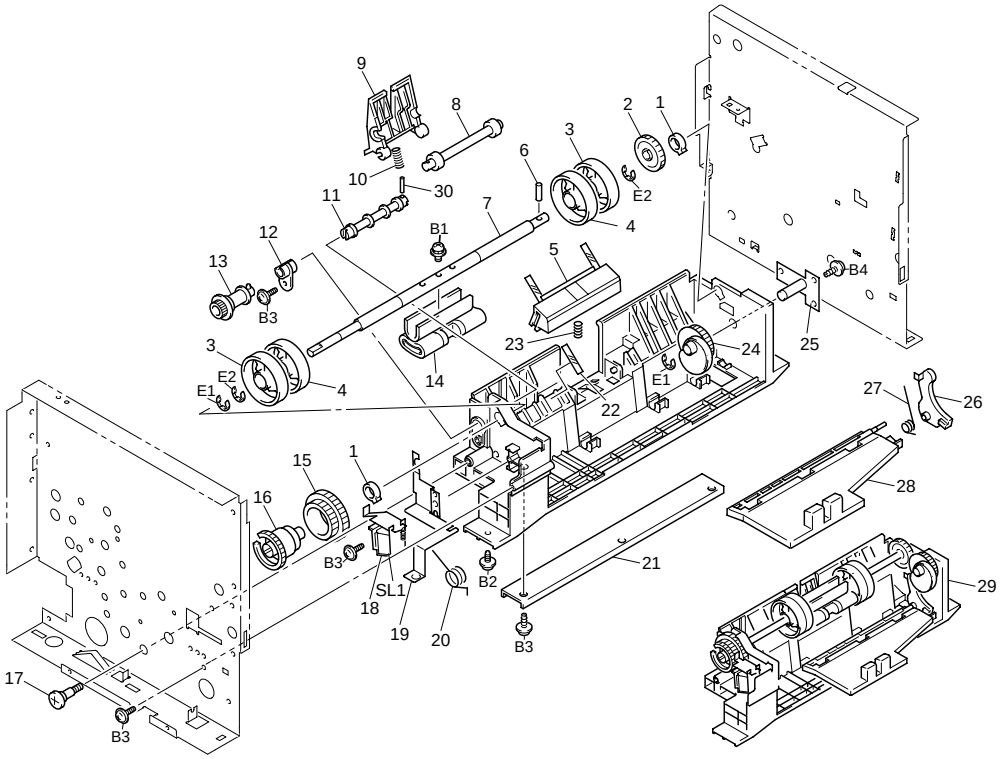


NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] Drive Unit					
1	LHLDW2183SCZZ	AD		C	Wire holder
2	LPLTM3013XHZZ	AK		C	Drive system plate
3	NGERH2464XHZZ	AC		C	RS gear(18/60Z)
4	NGERH2465XHZZ	AC		C	RS gear(50/87Z)
5	RMOTZ2146XHZZ	AW		B	Transfer motor
B1	XHBSD30P06000	AA		C	Screw(3x6)
[7] Scanner Frame Unit					
1	CBSHP2079SC02	AL		C	Scanner feed clutch
2	LBSHP2113XHZZ	AH		C	DR bearing
3	LFRM-2201XHZZ	AL		C	Scanner frame
4	LPLTM3012XHZZ	AL		C	Scanner support plate
5	MSPRC3138XHZZ	AE		C	CIS spring
6	MSPRD3086XHZZ	AH		C	Pinch roller spring
7	MSPRP2841XHZZ	AC		C	Stopper spring
8	MSPRP3087XHZZ	AF		C	FD1 earth spring
9	MSPRP3088XHZZ	AF		C	SD2 earth spring
10	NBRGP2128XHZA	AE		C	Bearing
11	NBRGP2138XHZZ	AD		C	Scanner bearing 1
12	NBRGP2141XHZZ	AH		C	Scanner bearing 2
13	NGERH2319XHZZ	AD		C	ADF transfer gear
14	NGERH2320XHZZ	AD		C	Transfer idler gear
15	NGERH2322XHZZ	AC		C	ADF feed gear
16	NGERH2462XHZZ	AC		C	Feed gear(73Z)
17	NGERH2463XHZZ	AC		C	Drive gear(49Z)
18	NROLP2332XHZZ	AD		C	Pinch roller
19	NROLR2417XHZZ	AH		C	Transfer roller
20	NROLR2338XHZZ	AK		C	Scanner feed roller
21	NROLR2418XHZZ	AL		C	Scanner drive roller 1
22	NROLR2419XHZZ	AK		C	Scanner drive roller 2
23	NSFTZ2307XHZZ	AK		C	Scanner feed shaft 1
24	NSFTZ2308XHZZ	AL		C	Scanner feed shaft 2
25	PBRS-2048XHZZ	AD		C	Paper earth brush
26	PTME-2067XHZZ	AK		C	Anti curl piece
27	QCNW-277AXHZZ	AY		C	Document sensor cable
28	QCNW-4953XHZZ	AK		C	CIS cable
29	QSW-M2296XHZZ	AD		C	Transfer sensor switch
30	QSW-M2298XHZZ	AE		C	Front sensor switch
31	QSW-Z2237SCZZ	AE		B	Document sensor switch
⚠ 32	RCORF2124XHZZ	AE		B	Core
33	RUNTZ2038SCB4	AZ		E	CIS(Contact image sensor)unit
34	PSTM-2015SCZZ	AX		E	Verification stamp(FO-45VS)
35	UINK-2009SC01	BA		C	Stamp only(20 pieces)
B1	XHBSD30P06000	AA		C	Screw(3x6)
B2	XEBSD30P10000	AA		C	Screw(3x10)
E1	XRESJ50-06000	AA		C	E type ring(5mm)

[8] Frames

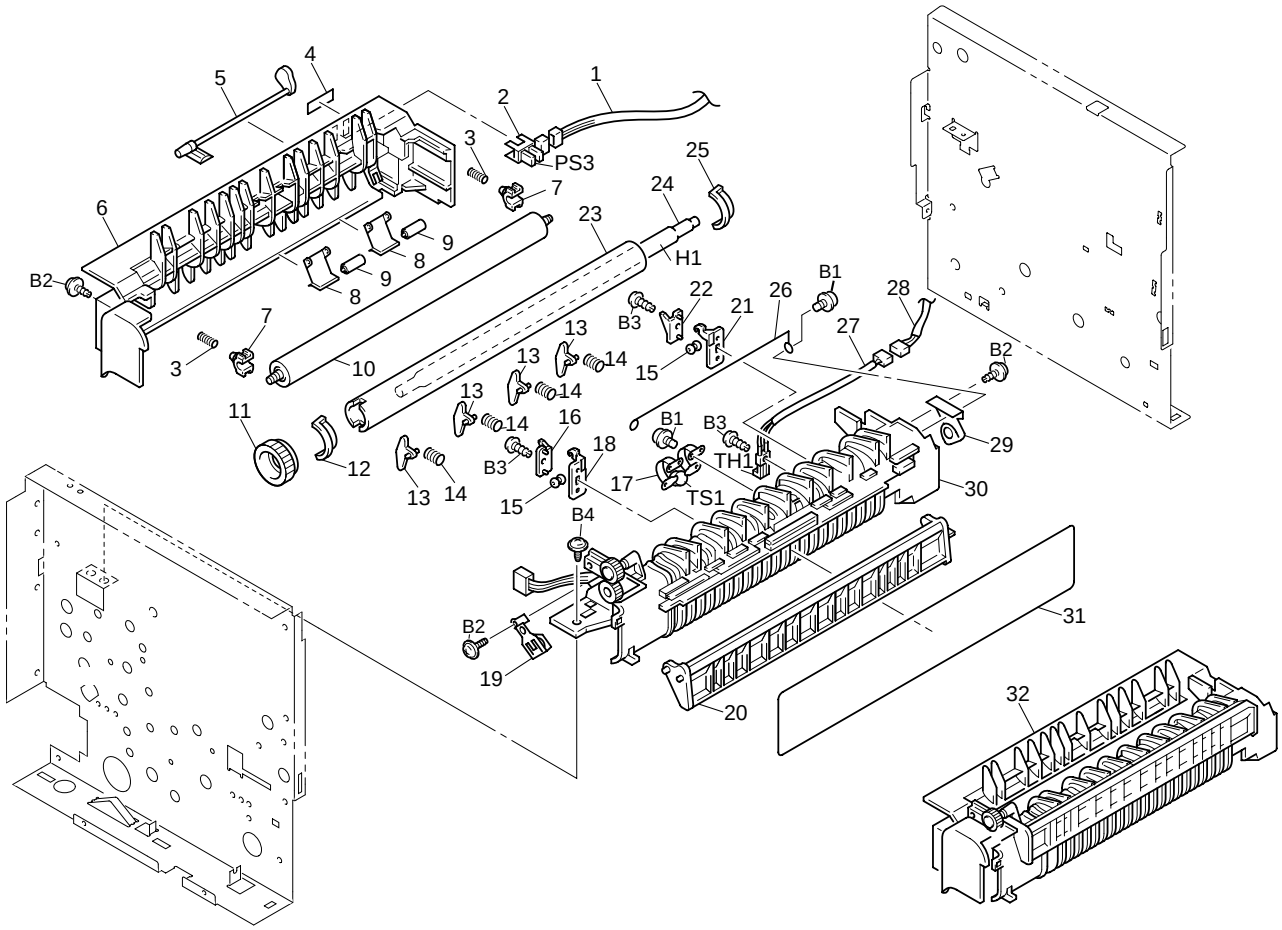


[9] Paper Take-up Section



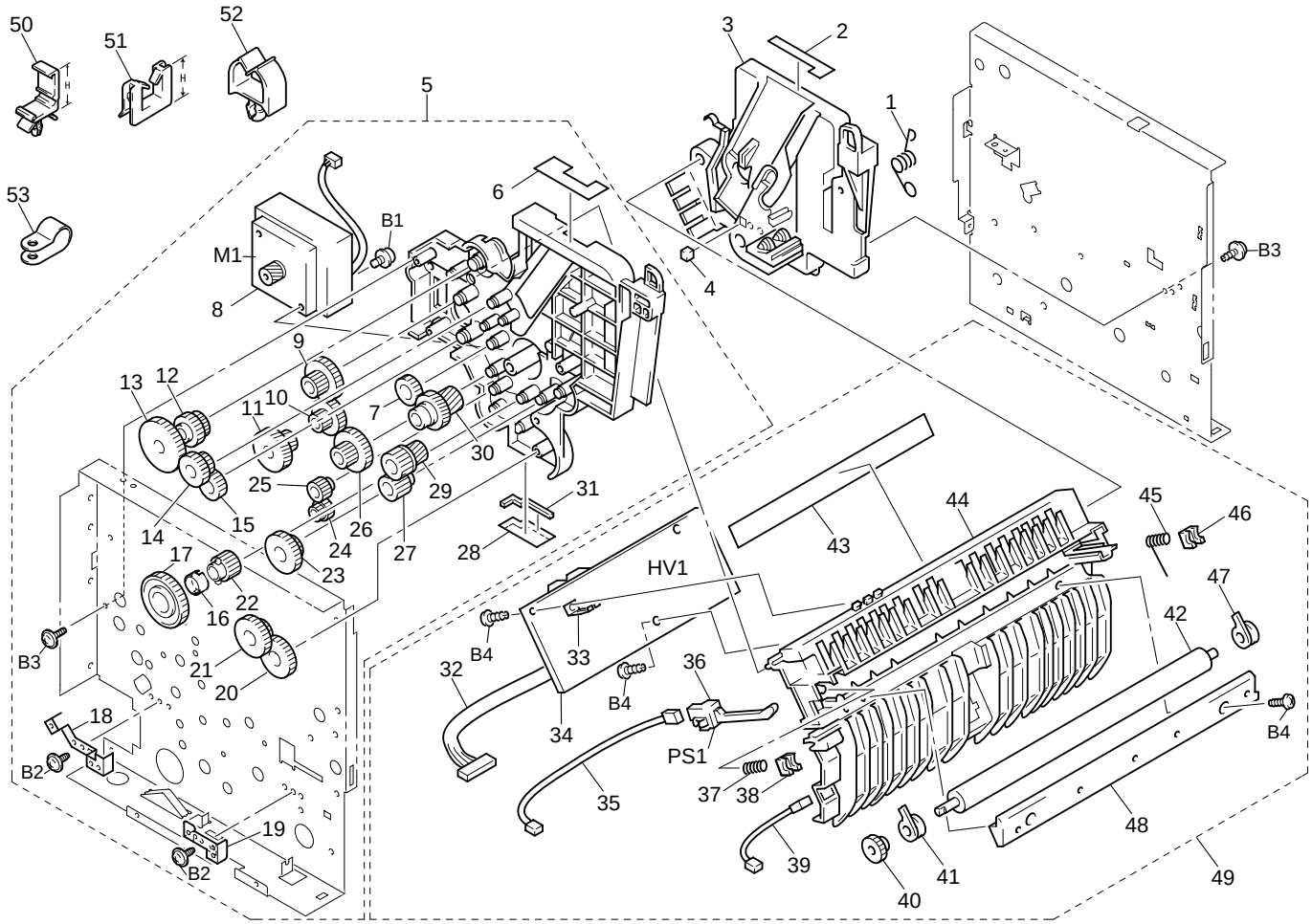
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] Frames					
1	0KW4122207102	AM		C	Reinforce plate
2	0KW4122681702	AN		C	Wire harness assy
3	0KW4109302202	AC		C	Torsion spring
4	0KW4122010202	BD		E	Toner empty PWB unit [PWB-G]
5	0KW4109302005	AL		C	Guide
6	0KW4122207801	BB		C	Bracket
7	0KW4122610101	BP		B	Fan motor [M3]
8	0KW0993204501	AC		C	Screw,special
9	0KW4122207902	AQ		C	Reinforce plate
10	0KW4122235001	AF		C	Rubber foot
11	0KW4122207001	AD		C	Bracket
12	0KW4109053103	BY		E	Print head unit
13	0KW4109202401	AF		D	Label
14	0KW4109202102	AD		C	Holder
15	0KW4109301302	AD		C	Sheet
16	0KW4122206901	AG		C	Holder
17	0KW4122630401	AL		B	Paper empty sensor [PE1]
18	0KW4122360502	AQ		C	Lifting plate
19	0KW4122206801	AQ		C	Holder
20	0KW4122340401	AD		C	Guide
21	0KW4122207601	AD		C	Bracket
22	0KW4122681401	AL		C	Wire harness assy
23	0KW4122340501	AD		C	Guide
24	0KW4122340201	AF		C	Regulating plate
B1	0KW9646030613	AB		C	Screw
B2	0KW9735030613	AB		C	Tapping screw
B3	0KW9739030813	AB		C	Tapping screw
B4	0KW9739030613	AB		C	Tapping screw
B5	0KW9739030813	AB		C	Tapping screw
B6	0KW9743030813	AB		C	Tapping screw
[9] Paper Take-up Section					
1	0KW0972300901	AF		C	Bushing
2	0KW4122360701	AF		C	Gear(28T)
3	0KW4122305601	AH		C	Roll
4	0KW4122305501	AL		C	Roll
5	0KW4110075101	AT		C	Separated pad
6	0KW0957304001	AE		C	Pin
7	0KW4122362902	AQ		C	Shaft
8	0KW4122300201	BK		C	Roller
9	0KW4109350203	AH		C	Holder
10	0KW4110301801	AC		C	Pressure spring
11	0KW4109303301	AF		C	Joint
12	0KW4109301514	AD		C	Bushing
13	0KW4109301412	AD		C	Gear(18T)
14	0KW4122300101	AU		C	Roller
15	0KW4109303413	AF		C	Gear(36/54T)
16	0KW4109301003	AF		C	Gear(36T)
17	0KW4109305101	AD		C	Shoulder screw
18	0KW4122620101	BC		B	Paper take up solenoid [SL1]
19	0KW4122365001	AG		C	Earth ground
20	0KW4122361902	AC		C	Torsion spring
21	0KW4109305201	AG		C	Plate
22	0KW4110350301	AC		C	Polyester film
23	0KW4109304103	AC		C	Pressure spring
24	0KW4122355602	AG		C	Cam gear(28T)
25	0KW4122020101	AG		C	Bracket
26	0KW4122364201	AG		C	Arm
27	0KW4122361602	AD		C	Torsion spring
28	0KW4122364301	AR		C	Lever
29	0KW4122033102	BT		E	Paper take-up unit
30	0KW9751301050	AE		C	Pin
B1	0KW9646030813	AB		C	Screw
B2	0KW9735030613	AB		C	Tapping screw
B3	0KW9739030813	AB		C	Tapping screw
B4	0KW9739030613	AB		C	Tapping screw
E1	0KW9721050001	AB		C	Retaining ring
E2	0KW9721090001	AC		C	Retaining ring

[10] Fusing Unit



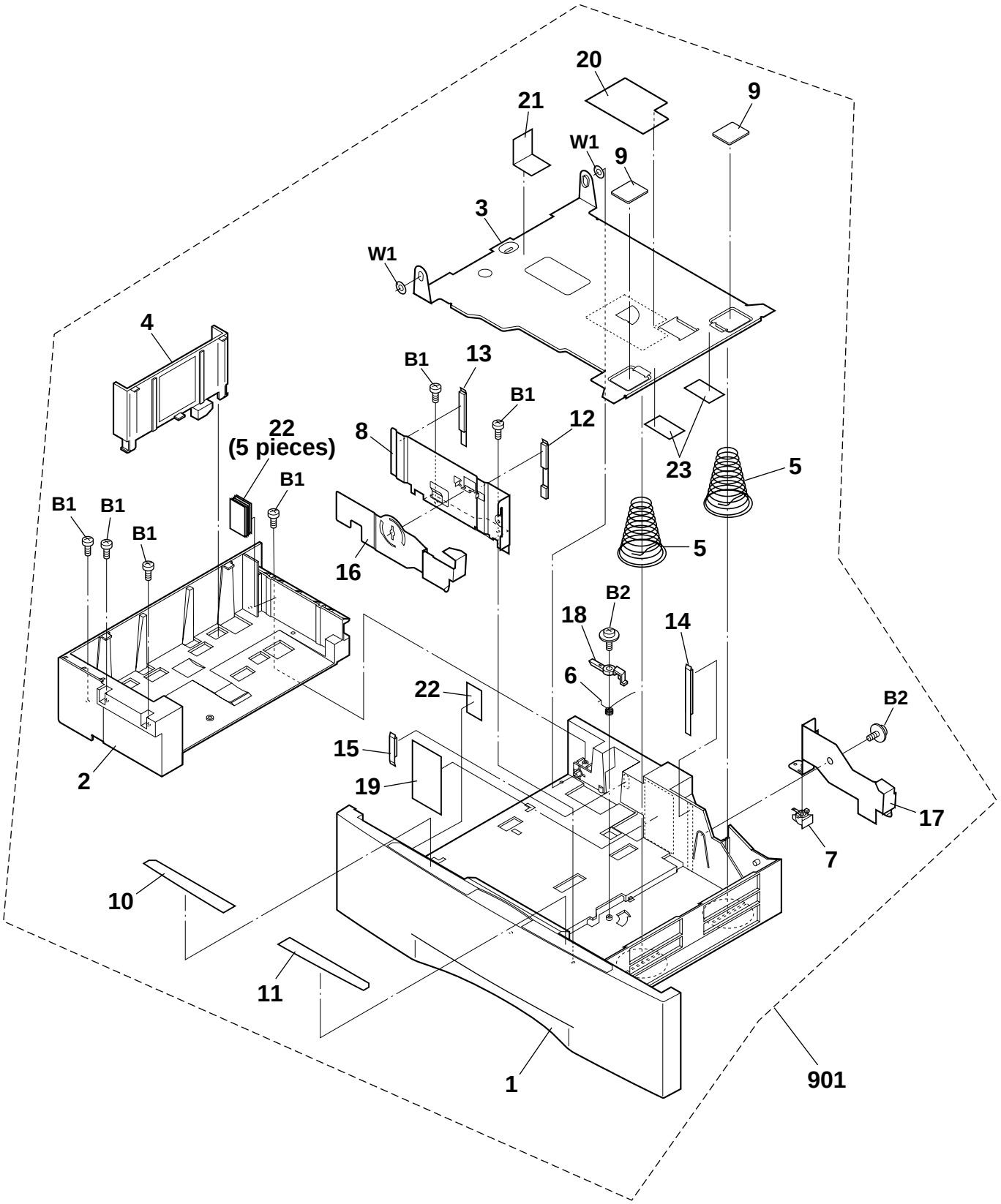
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[10] Fusing Unit					
1	0KW4122680302	AM		C	Wire harness assy
2	0KW9335141031	BA		B	Paper exit sensor [PS3]
3	0KW4109551701	AC		C	Pressure spring
4	0KW4109553001	AC		C	Stopper
5	0KW4109551801	AF		C	Actuator
6	0KW4109550503	BA		C	Guide
7	0KW4110551101	AH		C	Bushing
8	0KW4110553501	AH		C	Holder
9	0KW4110553601	AS		C	Roll
10	0KW4109550201	BD		C	Fusing roller
11	0KW4109551201	AL		C	Gear(36T)
12	0KW4109552101	AK		C	Bushing
13	0KW4109553301	AL		C	Separator
14	0KW4109551601	AC		C	Pressure spring
15	0KW0957551601	AG		C	Separator roll
16	0KW4109554301	AD		C	Stopper
17	0KW4109630201	AY		B	Thermostat [TS1]
18	0KW4109554101	AD		C	Holder
19	0KW4109552402	AG		C	Holder
20	0KW4109550312	AN		C	Guide
21	0KW4109554201	AD		C	Holder
22	0KW4109554401	AD		C	Stopper
23	0KW4109550101	BF		C	Fusing roller
24	0KW4109650201	BB		B	Tube lamp,Heater 120V [H1]
25	0KW4109552201	AL		C	Bushing
26	0KW4109552601	AF		C	Terminal
27	0KW4109670101	AY		B	Thermistor [TH1]
28	0KW4122680701	AL		C	Wire harness assy
29	0KW4109552501	AG		C	Holder
30	0KW4109075404	BD		C	Housing assy
31	0KW4109555001	AQ		C	Protection
32	0KW4122035201	BV		E	Fusing unit,120V
B1	0KW9646030613	AB		C	Screw
B2	0KW9739030813	AB		C	Tapping screw
B3	0KW9742031013	AB		C	Tapping screw
B4	0KW9735030813	AC		C	Tapping screw

[11] Drive/Transfer Section



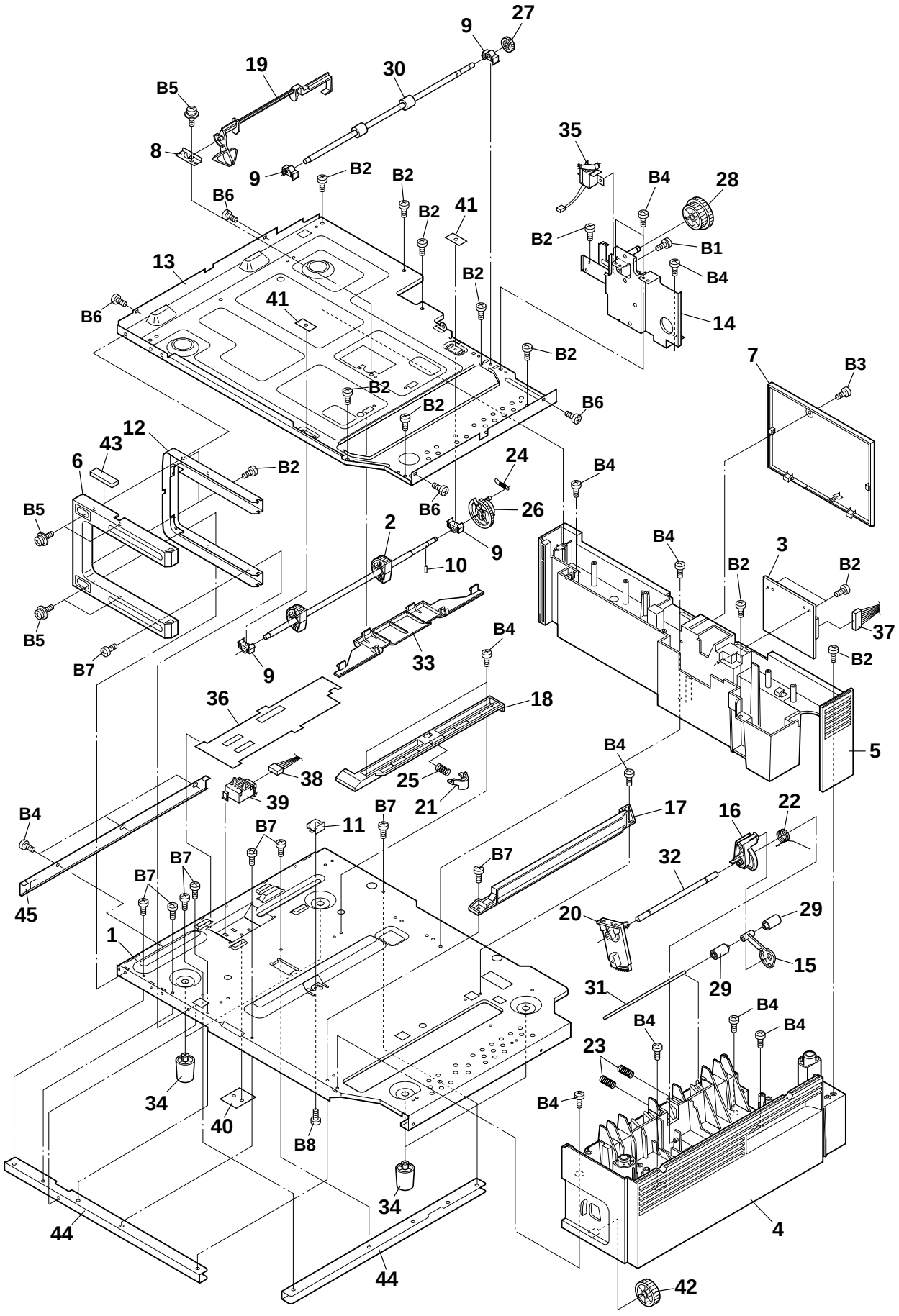
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[11] Drive/Transfer Section					
1	0KW4109201301	AF		C	Torsion spring
2	0KW4109202201	AC		D	Label(Right)
3	0KW4109075605	BC		E	Frame ass'y
4	0KW4109201502	AC		C	Rubber strip
5	0KW4122030102	BU		E	Drive unit
6	0KW4109202301	AD		D	Label(Left)
7	0KW4109250301	AH		C	Gear(40T)
8	0KW4122610501	BN		B	Printer motor [M1]
9	0KW4109250501	AF		C	Gear(18/50T)
10	0KW4109250101	AL		C	Gear(20/44T)
11	0KW4109250201	AL		C	Gear(20/52T)
12	0KW4109250701	AF		C	Gear(24/30T)
13	0KW4109250601	AF		C	Gear(20/48T)
14	0KW4109251401	AF		C	Gear(20/32T)
15	0KW4109251501	AD		C	Gear(26T)
16	0KW4122252212	AN		C	Collar
17	0KW4122252001	AV		C	Gear(50T)
18	0KW4122233101	AC		C	Bracket
19	0KW4122233001	AC		C	Bracket
20	0KW4109251901	AF		C	Gear(27T)
21	0KW4109251801	AF		C	Gear(17/42T)
22	0KW4122252112	AD		C	Gear(21T)
23	0KW4109251001	AF		C	Gear(18/42T)
24	0KW4109251701	AF		C	Gear(17/25T)
25	0KW4109251601	AD		C	Gear(17T)
26	0KW4109250801	AG		C	Gear(21/56T)
27	0KW4109251101	AF		C	Gear(20T)
28	0KW4109203902	AG		C	Polyester film
29	0KW4109251201	AL		C	Gear(20/28T)
30	0KW4109250401	AK		C	Gear(22/43T)
31	0KW4109206001	AF		C	Sponge
32	0KW4122680602	AV		C	Wire harness assy
33	0KW4109411201	AD		C	Plate
34	0KW4109620201	BR		E	High voltage PWB unit [HV1]
35	0KW4122681302	AH		C	Wire harness assy
36	0KW4109630101	AN		C	Paper take up sensor switch [PS1]
37	0KW4109410802	AC		C	Pressure spring
38	0KW4109411503	AF		C	Bushing
39	0KW4122680502	AL		C	Wire harness assy
40	0KW4109411102	AF		C	Gear(21T)
41	0KW4109411702	AH		C	Bushing
42	0KW4109410301	BF		C	Roller
43	0KW4109411803	AD		C	Polyester film
44	0KW4109075501	BD		C	Guide assy
45	0KW4109410703	AC		C	Pressure spring
46	0KW4109411403	AF		C	Bushing
47	0KW4109410403	AH		C	Bushing
48	0KW4109076001	BB		C	Guide
49	0KW4122039102	CS		E	Transfer unit
50	0KW9384131091	AC		C	Wiring saddle(18.5H)
51	0KW9384201021	AD		C	Edge cover(8.5H)
52	0KW9384171111	AD		C	Wire saddle
53	0KW9384170024	AF		C	P-Clip
B1	0KW9646030813	AB		C	Screw
B2	0KW9735030613	AB		C	Tapping screw
B3	0KW9739030813	AB		C	Tapping screw
B4	0KW9742030813	AB		C	Tapping screw

[12] 2nd.Cassette (1)



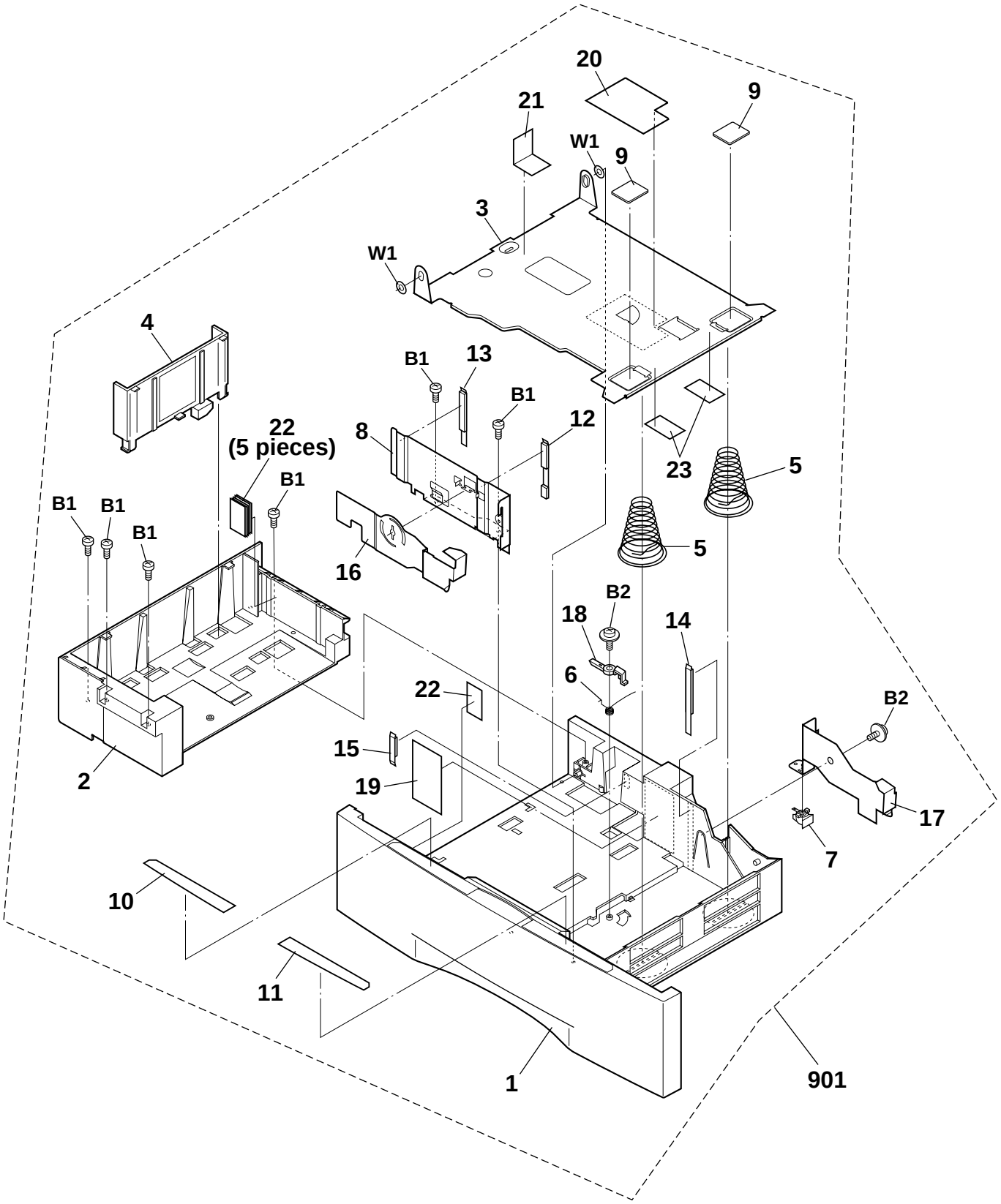
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[12] 2nd.Cassette (1)					
1	GCASP2108XHSA	AT		C	Cassette case
2	GCASP2109XHSA	AM		C	Ext. cassette case
3	LPLTM3022XHZA	AP	N	C	Cassette push up plate
4	LPLTP3021XHZZ	AF		C	Cassette back guide
5	MSPRC3092XHZA	AF	N	C	Push up plate spring
6	MSPRD3125XHZZ	AD		C	Lock down spring
7	PCAPH2032XHZZ	AC		C	Separate nail rear cap
8	PGIDM2549XHZZ	AQ		C	Cassette width guide
9	PSEL-2017XHZZ	AE		D	Cork sheet
10	PSHEZ3449XHZL	AF		D	Cassette blind sheet Left
11	PSHEZ3449XHZR	AF		D	Cassette blind sheet Right
12	PSPO-2008XHZZ	AE	N	C	Cassette width sponge D
13	PSPO-2009XHZZ	AE	N	C	Cassette width sponge E
14	PSHEP3596XHZB	AC	N	C	Cassette width sheet A
15	PSHEP3597XHZA	AC	N	C	Cassette width sheet B
16	PTME-2062XHZZ	AF		C	Separate nail front
17	PTME-2063XHZZ	AF		C	Separate nail rear
18	PTME-2064XHZZ	AF		C	Lock down piece
19	TLABH263AXHZZ	AE		D	Paper limit label 2
20	TLABH4815XHSA	AE		D	Cassette push setting label
21	PSHEP3595XHZZ	AC	N	C	Cassette sheet
22	PSPAZ2262XHZZ	AB	N	C	Cassette spacer
23	PSHEP3603XHZZ	AC	N	C	Cassette SP sheet
B1	XEBSD30P10000	AA		C	Screw(3x10)
B2	LX-BZ2205XHZZ	AC		C	Screw(3x8)
W1	LX-WZ2011XHZZ	AB	N	C	Polyslider washer
	(Unit)				
901	CCASP2108XH01	BE		E	Cassette unit

[13] 2nd.Cassette (2)



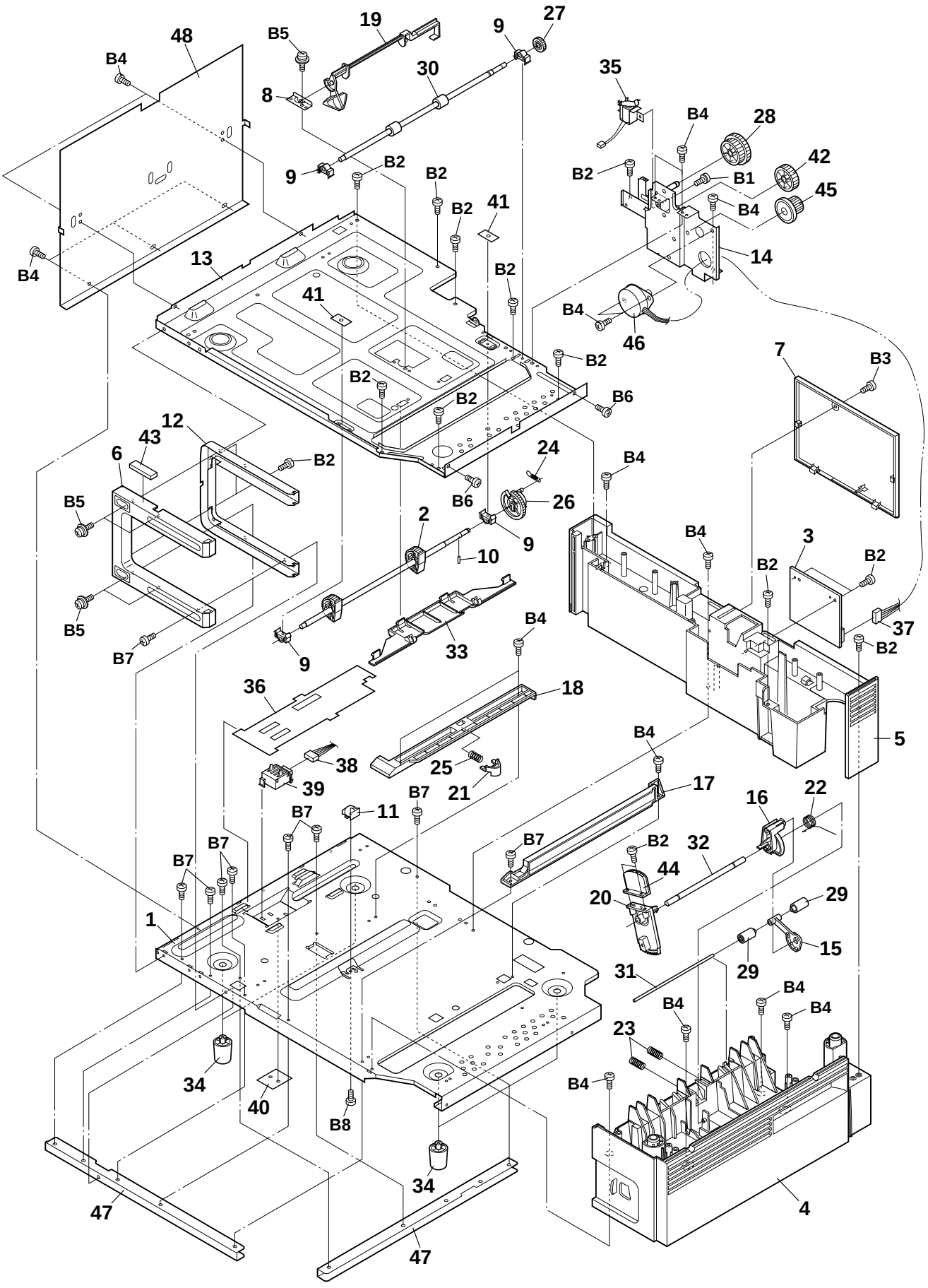
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[13] 2nd.Cassette (2)					
1	LPLTM3024XHZA	AX		C	2nd. bottom plate
2	CROLR2423XH02	AS	N	C	2nd. PU roller
3	DCEKZ472BXH01	AT		E	2nd. cassette PWB unit
4	GCABG2333XHSA	AQ		C	2nd. right cabinet
5	GCABH2334XHSA	AN		C	2nd. rear cabinet
6	GCOVA2407XHSA	AH		C	Slide frame cover
7	GCOVA2408XHSA	AH		C	PWB cover
8	LANGF2825XHZZ	AF		C	Lever bracket
9	LBSHP2109XHZZ	AF		C	2nd. drive bearing
10	LPINS2032XHZZ	AF		C	Roller pin
11	PCAPH2032XHZZ	AC		C	Separate nail rear cap
12	LPLTM3025XHZZ	AS		C	Slide frame plate
13	LPLTM3027XHZZ	AW		C	2nd. top plate
14	LPLTM3028XHZZ	AN		C	2nd. Drive system plate
15	LPLTP3023XHZZ	AF		C	2nd. lever joint 1
16	LPLTP3044XHZZ	AF		C	2nd. lever joint 2
17	LRALP2023XHZZ	AD		C	2nd. cassette rail right
18	LRALP2024XHZZ	AD		C	2nd. cassette rail left
19	MLEVP2308XHZZ	AD		C	2nd. paper sensor lever
20	MLEVP2309XHZZ	AE		C	2nd. release lever
21	MLOK-2008XHZZ	AC		C	Cassette lock piece
22	MSPRD3093XHZZ	AG		C	2nd. release lever spring
23	MSPRC3095XHZZ	AD		C	2nd. pinch roller spring
24	MSPRC3096XHZZ	AC		C	2nd. clutch spring
25	MSPRC3097XHZZ	AD		C	Cassette lock spring
26	NGERH2469XHZZ	AC		C	Paper feed clutch gear
27	NGERH2470XHZZ	AC		C	Paper drive gear
28	NGERH2471XHZZ	AE		C	Docking gear
29	NROLP2334XHZA	AC		C	Pinch roller
30	NROLR2422XHZZ	AN		C	2nd. drive roller
31	NSFTZ2309XHZZ	AC		C	2nd. pinch roller shaft
32	NSFTZ2312XHZZ	AC		C	2nd. release shaft
33	PGIDM2552XHZB	AF	N	C	2nd. guide upper
34	PLEGP2071XHZZ	AE		C	Foot
35	PMAGE2056XHZA	AN		C	Solenoid
36	PSHEZ3437XHZZ	AF		C	Cassette sensor cover
37	QCNW-4962XHZZ	AF		C	Cassette connect cable
38	QCNW-4964XHZZ	AF		C	2nd. paper size cable
39	QSW-Z2286XHZZ	AH		C	Cassette size sensor
40	PSHEZ3478XHZZ	AB		C	Sensor sheet
41	PSHEZ3477XHZZ	AB		C	Bearing sheet
42	NGERH2472XHZZ	AA		C	Idler gear(30OZ)
43	PSPAZ2253XHZZ	AD		C	Cabinet spacer 2
44	LPLTM3080XHZZ	AF		C	Support plate B
45	LANGK2826XHZZ	AV		C	3rd. joint bracket
B1	XBPSD30P06K00	AA		C	Screw(3x6)
B2	XEBSD30P10000	AA		C	Screw(3x10)
B3	XEBSE30P10000	AA		C	Screw(3x10)
B4	XHBSD30P06000	AA		C	Screw(3x6)
B5	LX-BZ2240XHZZ	AB		C	Screw(3x6)
B6	XHBSE30P06000	AA		C	Screw(3x6)
B7	XHBSE30P10000	AA		C	Screw(3x10)
B8	XEBSD30P08000	AA		C	Screw(3x8)

[14] 3rd.Cassette (1)



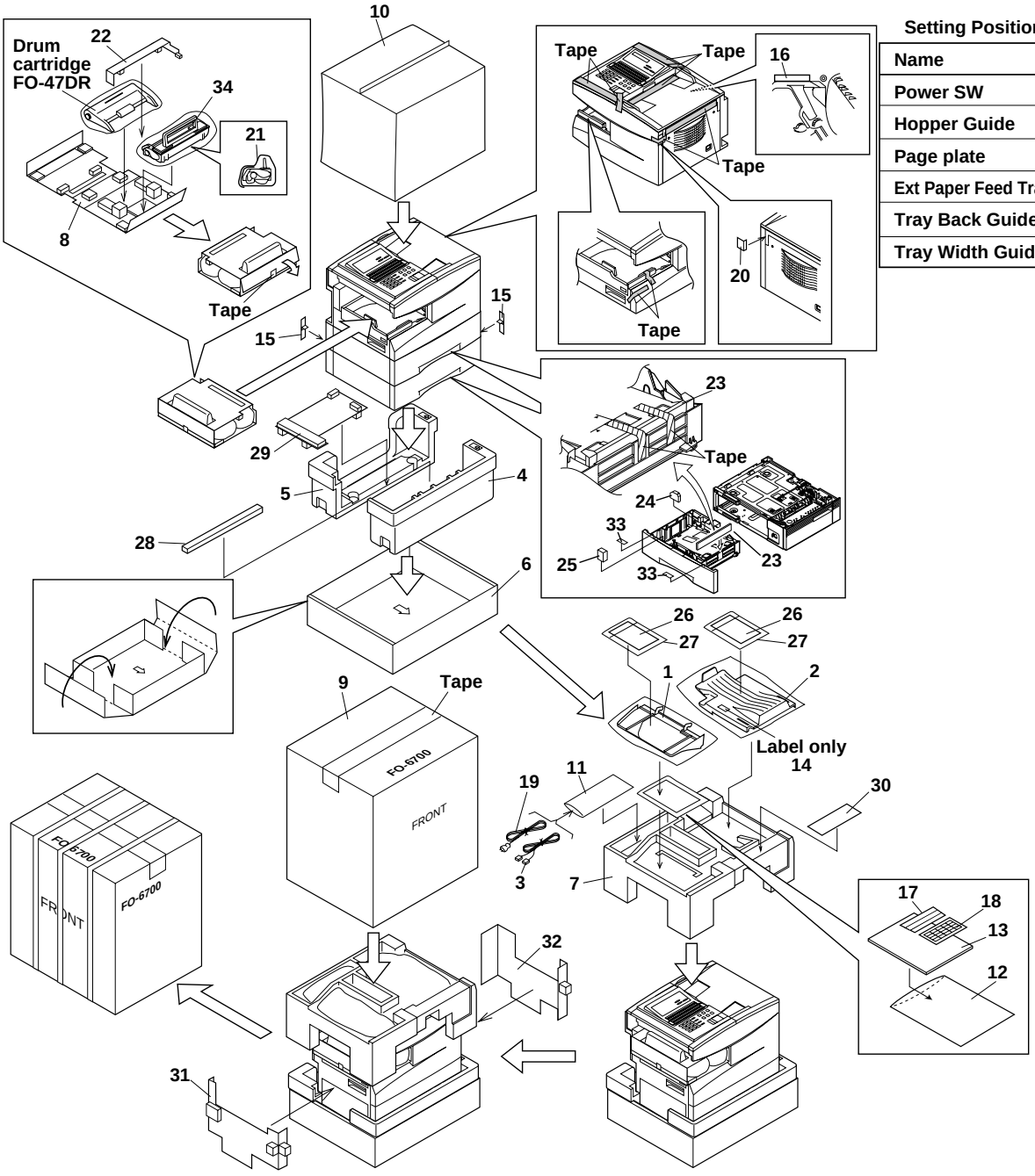
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[14] 3rd.Cassette (1)					
1	GCASP2108XHSA	AT		C	Cassette case
2	GCASP2109XHSA	AM		C	Ext. cassette case
3	LPLTM3022XHZA	AP	N	C	Cassette push up plate
4	LPLTP3021XHZZ	AF		C	Cassette back guide
5	MSPRC3092XHZA	AF	N	C	Push up plate spring
6	MSPRD3125XHZZ	AD		C	Lock down spring
7	PCAPH2032XHZZ	AC		C	Separate nail rear cap
8	PGIDM2549XHZZ	AQ		C	Cassette width guide
9	PSEL-2017XHZZ	AE		D	Cork sheet
10	PSHEZ3449XHZL	AF		D	Cassette blind sheet Left
11	PSHEZ3449XHZR	AF		D	Cassette blind sheet Right
12	PSPO-2008XHZZ	AE	N	C	Cassette width sponge D
13	PSPO-2009XHZZ	AE	N	C	Cassette width sponge E
14	PSHEP3596XHZB	AC	N	C	Cassette width sheet A
15	PSHEP3597XHZA	AC	N	C	Cassette width sheet B
16	PTME-2062XHZZ	AF		C	Separate nail front
17	PTME-2063XHZZ	AF		C	Separate nail rear
18	PTME-2064XHZZ	AF		C	Lock down piece
19	TLABH263AXHZZ	AE		D	Paper limit label 2
20	TLABH4815XHSA	AE		D	Cassette push setting label
21	PSHEP3595XHZZ	AC	N	C	Cassette sheet
22	PSPAZ2262XHZZ	AB	N	C	Cassette spacer
23	PSHEP3603XHZZ	AC	N	C	Cassette SP sheet
B1	XEBSD30P10000	AA		C	Screw(3x10)
B2	LX-BZ2205XHZZ	AC		C	Screw(3x8)
W1	LX-WZ2011XHZZ	AB	N	C	Polyslider washer
	(Unit)				
901	CCASP2108XH01	BE		E	Cassette unit

[15] 3rd.Cassette (2)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[15] 3rd.Cassette (2)					
1	LPLTM3024XHZA	AX		C	3rd. bottom plate
2	CROLR2423XH02	AS	N	C	3rd. PU roller
3	DCEKZ228CXH01	BN		E	3rd. cassette PWB unit
4	GCABG2333XHSA	AQ		C	3rd. right cabinet
5	GCABH2334XHSA	AN		C	3rd. rear cabinet
6	GCOVA2407XHSA	AH		C	Slide frame cover
7	GCOVA2408XHSA	AH		C	PWB cover
8	LANGF2825XHZZ	AF		C	Lever bracket
9	LBSHP2109XHZZ	AF		C	3rd. drive bearing
10	LPINS2032XHZZ	AF		C	Roller pin
11	PCAPH2032XHZZ	AC		C	Separate nail rear cap
12	LPLTM3025XHZZ	AS		C	Slide frame plate
13	LPLTM3027XHZZ	AW		C	3rd. top plate
14	LPLTM3028XHZA	AN		C	3rd. Drive system plate
15	LPLTP3023XHZZ	AF		C	3rd. lever joint 1
16	LPLTP3044XHZZ	AF		C	3rd. lever joint 2
17	LRALP2023XHZZ	AD		C	3rd. cassette rail right
18	LRALP2024XHZZ	AD		C	3rd. cassette rail left
19	MLEVP2308XHZZ	AD		C	3rd. paper sensor lever
20	MLEVP2309XHZZ	AE		C	3rd. release lever
21	MLOK-2008XHZZ	AC		C	Cassette lock piece
22	MSPRD3093XHZZ	AG		C	3rd. release lever spring
23	MSPRC3095XHZZ	AD		C	3rd. pinch roller spring
24	MSPRC3096XHZZ	AC		C	3rd. clutch spring
25	MSPRC3097XHZZ	AD		C	Cassette lock spring
26	NGERH2469XHZZ	AC		C	Paper feed clutch gear
27	NGERH2470XHZZ	AC		C	Paper drive gear
28	NGERH2471XHZZ	AE		C	Docking gear
29	NROLP2334XHZA	AC		C	Pinch roller
30	NROLR2422XHZZ	AN		C	3rd. drive roller
31	NSFTZ2309XHZZ	AC		C	3rd. pinch roller shaft
32	NSFTZ2312XHZZ	AC		C	3rd. release shaft
33	PGIDM2552XHZB	AF	N	C	3rd. guide upper
34	PLEGP2071XHZZ	AE		C	Foot
35	PMAGE2056XHZA	AN		C	Solenoid
36	PSHEZ3437XHZZ	AF		C	Cassette sensor cover
37	QCNW-283AXHZZ	AK		C	3rd. cassette cable
38	QCNW-4964XHZZ	AF		C	3rd. paper size cable
39	QSW-Z2286XHZZ	AH		C	Cassette size sensor
40	PSHEZ3478XHZZ	AB		C	Sensor sheet
41	PSHEZ3477XHZZ	AB		C	Bearing sheet
42	NGERH2474XHZZ	AE		C	Reduction gear(28/54Z)
43	PSPAZ2255XHZZ	AD		C	Cabinet spacer 3
44	LPLTP3078XHZZ	AE		C	3rd. gear plate
45	NGERH2473XHZZ	AE		C	Reduction gear(20/43Z)
46	RMOTZ2147XHZZ	AT		B	3rd. motor
47	LPLTM3080XHZZ	AF		C	Support plate B
48	LPLTM3079XHZZ	AG		C	Support plate A
B1	XBPSD30P06K00	AA		C	Screw(3x6)
B2	XEBSD30P10000	AA		C	Screw(3x10)
B3	XEBSE30P10000	AA		C	Screw(3x10)
B4	XHBSD30P06000	AA		C	Screw(3x6)
B5	LX-BZ2240XHZZ	AB		C	Screw(3x6)
B6	XHBSE30P06000	AA		C	Screw(3x6)
B7	XHBSE30P10000	AA		C	Screw(3x10)
B8	XEBSD30P08000	AA		C	Screw(3x8)

[16] Packing Material & Accessories (FO-6700U)



Setting Position Before Packing

Name	Setting Position
Power SW	OFF
Hopper Guide	Setting to Wide Side
Page plate	Normal Position
Ext Paper Feed Tray	LTR
Tray Back Guide	LTR
Tray Width Guide	LTR

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[16] Packing Material & Accessories (FO-6700U)					
1	CPLTP2803XHC3	AV		C	Document tray ass'y
2	CPLTP3009XHC1	AU		C	Paper stock tray with label ass'y
⚠ 3	QCNW-290ASCZZ	AE		C	Telephone line cord
4	SPAKA264CXHZZ	AD		D	Packing add.,bottom front
5	SPAKA265CXHZZ	AD		D	Packing add.,bottom back
6	SPAKA130BXHZZ	AH		C	Bottom tray
7	SPAKA505AXHZZ	AF		D	Packing add.,top
8	SPAKA506AXHZZ	AP		D	Packing add
9	SPAKC235CXHTZ	BA	N	D	Packing case,top(Made in Thailand)
	SPAKC282CSCJZ	BA	N	D	Packing case,top(Made in Japan)
10	SPAKP398BXHZZ	AF		D	Vinyl cover
11	SSAKA1430QCZZ	AB		D	Vinyl bag
12	SSAKA2003XHZZ	AA		D	Vinyl bag(240x360mm)
13	TINSE4149XHTZ	AZ	N	D	Operation manual
14	TLABH4813XHSA	AE		D	Tray caution label
15	PSPAZ2245XHZZ	AD		C	Cabinet spacer
16	SPAKA358BXHZZ	AE	N	D	Printer rear AD P.P.sheet
17	TLABP287CXHZZ	AF	N	D	Paper size label
18	TLABZ3935XHZZ	AF		D	Rapid key labels
⚠ 19	QACCD7618QCZZ	AQ		C	AC cord
20	SPAKA006AXHZZ	AC		C	Protection sheet
21	SPAKA241BXHZZ	AH		C	Air sheet
22	SPAKA166BXHZZ	AH		C	Protection Sheet
23	SPAKA146BXHZZ	AH		D	Cassette protection
24	SPAKA229BXHZZ	AE		C	Cassette protection pad A
25	SPAKA230BXHZZ	AE		C	Cassette protection pad B
26	GCOVA2416XHSA	AF		C	Left cover 2
27	SSAKA2342QCZZ	AA		C	Vinyl bag
28	SPAKA416BXHZZ	AH		D	Protect add
29	SPAKA438BXHZZ	AG		D	Protection add,bottom
30	SPAKA451BXHZZ	AB		C	Protection tray
31	SPAKA439BXHZZ	AG		D	Protection add,left
32	SPAKA440BXHZZ	AG		D	Protection add,right
33	PSPAZ2256XHZZ	AD		C	Cabinet spacer 4
34	DUNT-455BSCZZ	BV		S	Toner cartridge(Initial starter cartridge)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[17] Packing Material & Accessories (OPTION:FO-67DL)						
1	LBNDJ2006XHZZ	AA		C	Band(100mm)(100mm)	
2	LBSHP2131XHZZ	AD	N	C	PWB bush	
3	LPLTM3111XHZA	AX	N	C	Jack plate	
4	PCAPZ2089XHZZ	AE	N	C	PWB collar	
5	PSPAN2259XHZZ	AE	N	C	PWB spacer	
⚠ 6	QCNW-290ASCZZ	AE		C	Telephone line cord	
7	QCNWN441AXHZZ	AH	N	C	LIU 2 cable	
8	SPAKC245CXHTZ	AH	N	D	Packing case	
9	SPAKP247CXHZZ	AD	N	D	PWB protection pack	
10	SSAKA0006UCZZ	AA		D	Vinyl bag,screw	
11	SSAKA2340QCZZ	AA		D	Vinyl bag,operation manual	
12	SSAKH1131QCZZ	AA		D	Vinyl bag	
13	TINSE4150XHTZ	AE	N	D	Operation manual	
14	XHBSD30P06000	AA		C	Screw(3x6)	
15	XHBSD30P18000	AA		C	Screw(3x18)	
[18] Main Control PWB Unit						
1	UBATL2071XHZZ	AL		B	Battery	[BT1]
2	VCEAGA1HW107M	AA		C	Capacitor(50WV 100µF)	[C2]
3	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C3]
4	VCEAEA1CW336M	AB		C	Capacitor(16WV 33µF)	[C4]
5	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C5]
6	VCEAEA1HW475M	AA		C	Capacitor(50WV 4.7µF)	[C6]
7	VCEAEA1HW105M	AC		C	Capacitor(50WV 1µF)	[C7]
8	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C8]
9	VCEAEA1CW336M	AB		C	Capacitor(16WV 33µF)	[C9]
10	VCEAEA1CW336M	AB		C	Capacitor(16WV 33µF)	[C10]
11	VCEAEA1VW476M	AH		C	Capacitor(35WV 47µF)	[C11]
12	VCEAEA1CW336M	AB		C	Capacitor(16WV 33µF)	[C12]
13	VCEAEA1EW476M	AB		C	Capacitor(25WV 47µF)	[C13]
14	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C105]
15	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C108]
16	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C109]
17	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C111]
18	VCKYCY1HB331K	AA		C	Capacitor(50WV 330PF)	[C112]
19	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C113]
20	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C114]
21	VCCCCY1HH120J	AA		C	Capacitor(50WV 12PF)	[C115]
22	VCCCCY1HH180J	AA		C	Capacitor(50WV 18PF)	[C116]
23	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C117]
24	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C118]
25	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C119]
26	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C121]
27	VCCCCY1HH180J	AA		C	Capacitor(50WV 18PF)	[C122]
28	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C123]
29	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C124]
30	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C125]
31	VCKYCY1HB103K	AA		C	Capacitor(50WV 0.01µF)	[C126]
32	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C127]
33	VCKYCY1HB103K	AA		C	Capacitor(50WV 0.01µF)	[C128]
34	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C129]
35	VCCCCY1HH8R0D	AA		C	Capacitor(50WV 8PF)	[C130]
36	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C131]
37	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C132]
38	VCCCCY1HH471J	AA		C	Capacitor(50WV 470PF)	[C133]
39	VCCCCY1HH331J	AB		C	Capacitor(50WV 330PF)	[C134]
40	VCCCCY1HH471J	AA		C	Capacitor(50WV 470PF)	[C135]
41	VCCCCY1HH331J	AB		C	Capacitor(50WV 330PF)	[C137]
42	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C138]
43	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C139]
44	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C140]
45	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C141]
46	VCKYCY1HB331K	AA		C	Capacitor(50WV 330PF)	[C142]
47	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C143]
48	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C146]
49	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C147]
50	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C148]
51	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C149]
52	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C150]
53	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C151]
54	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C152]
55	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C153]
56	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C158]
57	VCCCCY1HH8R0D	AA		C	Capacitor(50WV 8PF)	[C159]
58	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C160]
59	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C161]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
60	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C162]
61	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C163]
62	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C165]
63	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C166]
64	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C167]
65	VCCCCY1HH470J	AA		C	Capacitor(50WV 47PF)	[C168]
66	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C169]
67	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C170]
68	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C171]
69	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C172]
70	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C173]
71	VCCCCY1HH331J	AB		C	Capacitor(50WV 330PF)	[C174]
72	VCCCCY1HH270J	AA		C	Capacitor(50WV 27PF)	[C175]
73	VCCCCY1HH220J	AA		C	Capacitor(50WV 22PF)	[C176]
74	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C177]
75	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C178]
76	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C179]
77	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C180]
78	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C181]
79	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C182]
80	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C183]
81	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C184]
82	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C185]
83	VCCCCY1HH100D	AA		C	Capacitor(50WV 10PF)	[C187]
84	VCCCCY1HH100D	AA		C	Capacitor(50WV 10PF)	[C189]
85	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C195]
86	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C196]
87	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C197]
88	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C198]
89	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C199]
90	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C203]
91	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C204]
92	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C205]
93	VCKYCY1HB103K	AA		C	Capacitor(50WV 0.01µF)	[C206]
94	VCKYCY1HB472K	AA		C	Capacitor(50WV 4700PF)	[C207]
95	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C208]
96	VCCCCY1HH120J	AA		C	Capacitor(50WV 12PF)	[C212]
97	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C214]
98	VCCCCY1HH150J	AB		C	Capacitor(50WV 15PF)	[C215]
99	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C216]
100	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C218]
101	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C219]
102	VCCCCY1HH330J	AA		C	Capacitor(50WV 33PF)	[C220]
103	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C222]
104	VCCCCY1HH102J	AC	N	C	Capacitor(50WV 1000PF)	[C223]
105	VCCCCY1HH330J	AA		C	Capacitor(50WV 33PF)	[C224]
106	VCCCCY1HH270J	AA		C	Capacitor(50WV 27PF)	[C225]
107	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C226]
108	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C228]
109	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C229]
110	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C237]
111	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C238]
112	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C239]
113	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C240]
114	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C241]
115	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C242]
116	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C243]
117	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C244]
118	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C245]
119	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C246]
120	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C247]
121	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C248]
122	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C249]
123	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C250]
124	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C251]
125	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C254]
126	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C255]
127	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C256]
128	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C257]
129	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C259]
130	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C260]
131	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C262]
132	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C263]
133	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C264]
134	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C265]
135	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C266]
136	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C267]
137	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C268]
138	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C269]
139	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C270]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
140	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C271]
141	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C272]
142	VCCCCY1HH150J	AB		C	Capacitor(50WV 15PF)	[C273]
143	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C274]
144	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C276]
145	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C277]
146	QCNCM7014SC1J	AC		C	Connector(10pin)	[CNCIS]
147	QCNCM7014SC0I	AB		C	Connector(9pin)	[CNLIU1]
148	QCNCM2401SC0I	AF	N	C	Connector(9pin)	[CNLIU2]
149	QCNCM2589SC5J	AL		C	Connector(50pin)	[CNOP]
150	QCNCM2482SC2D	AB		C	Connector(24pin)	[CNPN]
151	QCNCM2525SC3J	AH		C	Connector(30pin)	[CNPRT]
152	QCNCM7014SC1B	AD		C	Connector(12pin)	[CNPW]
153	QCNCM7014SC0H	AB		C	Connector(8pin)	[CNSEN]
154	QCNCM2401SC0B	AA		C	Connector(2pin)	[CNSP]
155	QCNCM7014SC0B	AD		C	Connector(2pin)	[CNSTP]
156	QCNCW2612SC6J	BA	N	C	Connector(60pin)	[CNSUB1]
157	QCNCW2612SC6J	BA	N	C	Connector(60pin)	[CNSUB2]
158	QCNCM7014SC0D	AB		C	Connector(4pin)	[CNTXM]
159	VHDSR104///-1	AF		B	Diode(SR104)	[D1]
160	VHDSR104///-1	AF		B	Diode(SR104)	[D2]
161	VHDSR104///-1	AF		B	Diode(SR104)	[D3]
162	VHDSR104///-1	AF		B	Diode(SR104)	[D4]
163	VHDDAP202U/-1	AB		B	Diode(DAP202U)	[D5]
164	VHDDA204K//-1	AC		B	Diode(DA204K)	[D100]
165	VHD1SS355//-1	AB		B	Diode(1SS355)	[D101]
166	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D102]
167	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D103]
168	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D104]
169	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D105]
170	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D106]
171	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D107]
172	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D108]
173	VHDDA204K//-1	AC		B	Diode(DA204K)	[D113]
174	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D115]
175	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D116]
176	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D117]
177	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D118]
178	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D119]
179	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D120]
180	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D121]
181	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D122]
182	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D124]
183	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D125]
184	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D134]
185	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D135]
186	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D136]
187	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D137]
188	VHD1SS355//-1	AB		B	Diode(1SS355)	[D144]
189	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D145]
190	VHD1SS355//-1	AB		B	Diode(1SS355)	[D146]
191	VHVICPS10//-1	AG		B	Varistor(ICP-S1.0)	[F100]
192	VHVICPS18//-1	AE		B	Varistor(ICP-S1.8)	[F101]
193	VHISM8578BV-1	AK		B	IC,Real Time clock(SM8578BV)	[IC1]
194	QSOCZ2066SC42	AP		C	IC Socket(42pin)	[IC2]
195	VHI27160FBQ0B	BM	N	B	IC,16Mbit EPROM	[IC2]
196	VHIAD8051//-1	AN		B	IC,Ope.AMP.(AD8051AR)	[IC3]
197	VHILC82103/-1	BA		B	IC,Image Signal Processor(LC82103)	[IC5]
198	VHINJM2904M-2	AG		B	IC,Dual Ope.AMP.(NJM2904M)	[IC6]
199	VHILB1845//-1	AY		B	IC,Motor Driver(LB1845)	[IC7]
200	VHILZ9FJ59/-1	AX		B	IC,Gate Array(A)(LZ9FJ59)	[IC8]
201	VHIBA10393F-1	AC		B	IC,Comparator(BA10393F)	[IC9]
202	VHILH28F80S10	BH		B	IC,8Mbit Flash Memory(LH28F800SUT-70)	[IC10]
203	VHINJM2113M-1	AG		B	IC,Speaker AMP.(NJM2113)	[IC11]
204	VHIHD7021606A	BE		B	IC,CPU SH7021(MASK)(HD6437021)	[IC12]
205	VHI1M16E//J-6	AZ		B	IC,1Mx16bit DRAM(MSM5118165)	[IC13]
206	VHIHD74LS374F	AF		B	IC,Octal D-Type Flip-Flops(HD74LS374)	[IC14]
207	RH-IX2164XHZZ	AY	N	B	IC,1Mbit SRAM(BS62LV1024SC-70)	[IC15]
208	VHIHD74LS244F	AF		B	IC,Octal Buffers(HD74LS244)	[IC20]
209	RH-IX2164XHZZ	AY	N	B	IC,1Mbit SRAM(BS62LV1024SC-70)	[IC21]
210	VHILR38292/-1	AY		B	IC,Gate Array(B)(LR38292)	[IC22]
211	VHI1M16E//J-6	AZ		B	IC,1Mx16bit DRAM(MSM5118165)	[IC23]
212	VHIHCF4053M1T	AG		B	IC,2ch.Analog Multiplexer(HCF4053)	[IC24]
213	VHIALS08NS/-1	AF		B	IC,Quad 2-Input and Gate(74ALS08)	[IC25]
214	VHIHD813201F1	BE		B	IC,IDP201(CODEC)(HD813201F)	[IC26]
215	VHIALS74ANS-1	AE		B	IC,Dual D-Type Flip-Flop(74ALS74)	[IC27]
216	VHIALS32NS/-1	AD		B	IC,Quad 2-Input or Gate(74ALS32)	[IC28]
217	VHIHD74HC08FM	AF		B	IC,Quadruple 2-Input and Gate(74HC08)	[IC29]
218	VHILH5116NA10	AL		B	IC,16Kbit SRAM(LH5116NA-10)	[IC30]
219	VHITC7S00FU-1	AE		B	IC,NAND Gate(TC7S00FU)	[IC31]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
220	VHIHD74HC32FM	AC		B	IC,Quadruple 2-Input or Gate(74HC32)	[IC32]
221	VHI74VHC393FT	AK		B	IC,Dual D-Type Flip-Flops(74VHC393)	[IC33]
222	VHI74VHC04F-1	AE		B	IC,Hex Inverter(74VHC04)	[IC34]
223	VHIHD74HC74FM	AD		B	IC,Dual D-Type Flip-Flops(74HC74)	[IC35]
224	VHIHD74HC157F	AH		B	IC,Quad2-to-10Ataselectors(74HC157)	[IC36]
225	VHIHD74LV08T1	AE		B	IC,Quadruple 2-Input and Gate(74LV08A)	[IC37]
226	VHIHD74HC14FM	AF		B	IC,Schmitt-Triger Inverter(74HC14)	[IC38]
227	VHIPST596CMT1	AF		B	IC,System Reset(PST596)	[IC39]
228	VHIALS20ANS-1	AF		B	IC,Dual 4-Input NAND(74ALS20)	[IC40]
229	VHIALS04BNS-1	AF		B	IC,Hex Inverter(74ALS04)	[IC41]
230	VHIALS32NS/-1	AD		B	IC,Quad 2-Input or Gate(74ALS32)	[IC42]
231	VHIALS163BNS/	AK		B	IC,Synchronous Binary Counter(74ALS163)	[IC43]
232	VHINJM78M12-1	AG		B	IC,Regulator(NJM78M12)	[IC44]
233	VHITC74HCU04F	AE		B	IC,Inverter(74HCU04)	[IC100]
234	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L100]
235	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[L101]
236	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L102]
237	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L103]
238	VS2SD1164//-1	AE		B	Transistor(2SD1164)	[Q1]
239	VS2SD1664Q/-1	AD		B	Transistor(2SD1664Q)	[Q100]
240	VS2SA1037KR-1	AB		B	Transistor(2SA1037K)	[Q101]
241	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q102]
242	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q103]
243	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q104]
244	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q105]
245	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q106]
246	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q107]
247	VSDTA114EK/-1	AB		B	Transistor(DTA114EK)	[Q108]
248	VSDTA114EK/-1	AB		B	Transistor(DTA114EK)	[Q109]
249	VRS-HT3AAR47J	AC		C	Resistor(1W 0.47Ω ±5%)	[R1]
250	VRS-HT3AAR47J	AC		C	Resistor(1W 0.47Ω ±5%)	[R2]
251	VRD-HT2HY152J	AA		C	Resistor(1/2W 1.5KΩ ±5%)	[R3]
252	VRG-ST2HB470J	AD	N	C	Resistor(1/2W 47Ω ±5%)	[R4]
253	VRS-CY1JB222J	AA		C	Resistor(1/16W 2.2KΩ ±5%)	[R100]
254	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R104]
255	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R105]
256	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R106]
257	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R107]
258	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R108]
259	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R109]
260	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R110]
261	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R111]
262	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R112]
263	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R113]
264	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R114]
265	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R116]
266	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R118]
267	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R119]
268	VRS-CY1JB182J	AA		C	Resistor(1/16W 1.8KΩ ±5%)	[R120]
269	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R121]
270	VRS-CY1JB302J	AA		C	Resistor(1/16W 3KΩ ±5%)	[R122]
271	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R124]
272	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R125]
273	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R127]
274	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R128]
275	VRS-CY1JB223F	AC	N	C	Resistor(1/16W 22KΩ ±1%)	[R129]
276	VRS-CY1JB333F	AA		C	Resistor(1/16W 33KΩ ±1%)	[R130]
277	VRS-CY1JB393F	AC	N	C	Resistor(1/16W 39KΩ ±1%)	[R132]
278	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R133]
279	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R134]
280	VRS-CY1JB563F	AC	N	C	Resistor(1/16W 56KΩ ±1%)	[R135]
281	VRS-CY1JB563F	AC	N	C	Resistor(1/16W 56KΩ ±1%)	[R136]
282	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R137]
283	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R139]
284	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R140]
285	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R141]
286	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R142]
287	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R143]
288	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R144]
289	VRS-CY1JB105J	AA		C	Resistor(1/16W 1MΩ ±5%)	[R145]
290	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R146]
291	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R147]
292	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R148]
293	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R149]
294	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R150]
295	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R151]
296	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R152]
297	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R153]
298	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R154]
299	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R155]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
300	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R156]
301	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R157]
302	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R158]
303	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R160]
304	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R161]
305	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R162]
306	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R164]
307	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R165]
308	VRS-CY1JB562J	AA		C	Resistor(1/16W 5.6KΩ ±5%)	[R166]
309	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R167]
310	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R168]
311	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R169]
312	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R171]
313	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R172]
314	VRS-CY1JB105J	AA		C	Resistor(1/16W 1MΩ ±5%)	[R173]
315	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R174]
316	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R175]
317	VRS-CY1JB681J	AA		C	Resistor(1/16W 680Ω ±5%)	[R176]
318	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R177]
319	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R178]
320	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R179]
321	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R180]
322	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R181]
323	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R182]
324	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R183]
325	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R184]
326	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R185]
327	VRS-CY1JB104J	AA		C	Resistor(1/16W 100KΩ ±5%)	[R186]
328	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R187]
329	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R188]
330	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R189]
331	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R190]
332	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R191]
333	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R192]
334	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R193]
335	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%)	[R194]
336	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%)	[R195]
337	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R196]
338	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R197]
339	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R198]
340	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R199]
341	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R200]
342	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R201]
343	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R202]
344	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%)	[R203]
345	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R204]
346	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R205]
347	VRS-CY1JB154J	AA		C	Resistor(1/16W 150KΩ ±5%)	[R206]
348	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%)	[R208]
349	VRS-CY1JB302J	AA		C	Resistor(1/16W 3KΩ ±5%)	[R209]
350	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R211]
351	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R212]
352	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R213]
353	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R214]
354	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R215]
355	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R216]
356	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R217]
357	VRS-CY1JB200J	AC	N	C	Resistor(1/16W 20Ω ±5%)	[R218]
358	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R219]
359	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R220]
360	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R221]
361	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R224]
362	VRS-CY1JB333J	AA		C	Resistor(1/16W 33KΩ ±5%)	[R225]
363	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R226]
364	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R227]
365	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%)	[R228]
366	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R229]
367	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R230]
368	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%)	[R231]
369	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%)	[R232]
370	VRS-CY1JB561J	AA		C	Resistor(1/16W 560Ω ±5%)	[R233]
371	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R234]
372	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R235]
373	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%)	[R236]
374	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R240]
375	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R241]
376	VRS-CY1JB223J	AA		C	Resistor(1/16W 22KΩ ±5%)	[R242]
377	VRS-CY1JB223J	AA		C	Resistor(1/16W 22KΩ ±5%)	[R243]
378	VRS-CY1JB203J	AA		C	Resistor(1/16W 20KΩ ±5%)	[R244]
379	VRS-CY1JB203J	AA		C	Resistor(1/16W 20KΩ ±5%)	[R245]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
380	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R246]
381	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R247]
382	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R248]
383	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R249]
384	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R250]
385	VRS-CY1JB203J	AA		C	Resistor(1/16W 20KΩ ±5%)	[R251]
386	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R252]
387	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R253]
388	VRS-CY1JB561J	AA		C	Resistor(1/16W 560Ω ±5%)	[R254]
389	VRS-CY1JB105J	AA		C	Resistor(1/16W 1MΩ ±5%)	[R255]
390	VRS-CY1JB302J	AA		C	Resistor(1/16W 3KΩ ±5%)	[R256]
391	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R257]
392	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R258]
393	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R259]
394	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R260]
395	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R261]
396	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R262]
397	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R263]
398	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R264]
399	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R265]
400	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R266]
401	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R267]
402	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R268]
403	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R269]
404	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R270]
405	VRS-CY1JB331J	AA		C	Resistor(1/16W 330Ω ±5%)	[R271]
406	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R272]
407	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R273]
408	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R274]
409	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R275]
410	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R276]
411	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R277]
412	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R278]
413	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R279]
414	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R280]
415	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R281]
416	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R282]
417	VRS-CY1JB102J	AA		C	Resistor(1/16W 1KΩ ±5%)	[R285]
418	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R286]
419	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R287]
420	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R288]
421	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R289]
422	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R290]
423	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R291]
424	VRS-CY1JB562J	AA		C	Resistor(1/16W 5.6KΩ ±5%)	[R292]
425	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R294]
426	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R295]
427	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R296]
428	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R297]
429	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R298]
430	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R300]
431	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R301]
432	VRS-CY1JB222J	AA		C	Resistor(1/16W 2.2KΩ ±5%)	[R302]
433	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%)	[R303]
434	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R304]
435	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R305]
436	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R306]
437	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R307]
438	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%)	[R308]
439	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R309]
440	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R310]
441	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R311]
442	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R312]
443	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R313]
444	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R322]
445	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R325]
446	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R326]
447	RR-TZ3018SCZZ	AC		C	Resistor array(470Ωx4)	[RA1]
448	RR-TZ3018SCZZ	AC		C	Resistor array(470Ωx4)	[RA2]
449	RR-TZ3016SCZZ	AA		C	Resistor array(33Ωx4)	[RA9]
450	RR-TZ3016SCZZ	AA		C	Resistor array(33Ωx4)	[RA10]
451	RR-TZ3023SCZZ	AC	N	C	Resistor array(100Ωx4)	[RA11]
452	RR-TZ3023SCZZ	AC	N	C	Resistor array(100Ωx4)	[RA12]
453	RCRSP0074AFZZ	AE		B	Crystal(32.768kHz)	[X1]
454	RCRSQ2162XHZZ	AH		B	Crystal(29.44MHz)	[X2]
455	RCRSZ2152XHZZ	AF		B	Crystal(19.6608MHz)	[X3]
456	RCRSZ2151XHZZ	AF		B	Crystal(20.31092MHz)	[X4]
457	RCRSZ2158XHZZ	AF		B	Crystal(16.00MHz)	[X5]
458	TLABN1235CCZZ	AA		D	EPROM label	
459	TLABP3078SCZZ	AA		D	Shading label(for EP-ROM)	

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[18] Main Control PWB Unit						
	(Unit)					
901	DCEKC185PXHZZ	CG	N	E	Main control PWB unit	
[19] Line-1 Control PWB Unit (FO-6700U), Line-2 Control PWB Unit (OPTION:FO-67DL)						
1	VCEAEA1EW106M	AA		C	Capacitor(25WV 10µF)	[C1]
2	VCEAEA1EW106M	AA		C	Capacitor(25WV 10µF)	[C2]
3	VCEAEA1EW106M	AA		C	Capacitor(25WV 10µF)	[C3]
4	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C4]
5	VCEAEA1EW106M	AA		C	Capacitor(25WV 10µF)	[C5]
6	VCEAEA1EW106M	AA		C	Capacitor(25WV 10µF)	[C6]
7	VCEAEA1EW476M	AB		C	Capacitor(25WV 47µF)	[C7]
8	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C8]
9	VCEAEA1CW476M	AA		C	Capacitor(16WV 47µF)	[C9]
10	VCEAEA1CW106M	AC		C	Capacitor(16WV 10µF)	[C10]
11	VCKYCY1HB103K	AA		C	Capacitor(50WV 0.01µF)	[C100]
12	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C101]
13	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C102]
14	VCCCCY1HH8R0D	AA		C	Capacitor(50WV 8PF)	[C103]
15	VCCCCY1HH100D	AA		C	Capacitor(50WV 10PF)	[C104]
16	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C105]
17	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C106]
18	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C107]
19	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C108]
20	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C109]
21	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C110]
22	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C111]
23	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C112]
24	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C113]
25	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C114]
26	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C115]
27	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C116]
28	VCCCCY1HH181J	AA		C	Capacitor(50WV 180PF)	[C117]
29	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C118]
30	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C119]
31	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C120]
32	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C121]
33	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C122]
34	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C123]
35	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C124]
36	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C125]
37	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C126]
38	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C127]
39	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C128]
40	VCKYCY1HB102K	AA		C	Capacitor(50WV 1000pF)	[C129]
41	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C132]
42	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C133]
43	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C134]
44	VCKYTV1CF225Z	AD		C	Capacitor(16WV 2.2µF)	[C135]
45	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C136]
46	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C137]
47	VCKYTV1CF225Z	AD		C	Capacitor(16WV 2.2µF)	[C139]
48	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C140]
49	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C141]
50	VCKYCY1CB104K	AB		C	Capacitor(16WV 0.1µF)	[C142]
51	VCCCCY1HH331J	AB		C	Capacitor(50WV 330PF)	[C143]
52	VCCCCY1HH221J	AA		C	Capacitor(50WV 220PF)	[C144]
53	VCKYCY1HB102K	AA		C	Capacitor(50WV 1000pF)	[C145]
54	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C147]
55	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C148]
56	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C149]
57	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C150]
58	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C151]
59	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C153]
60	VCCCCY1HH470J	AA		C	Capacitor(50WV 47PF)	[C154]
61	VCCCCY1HH470J	AA		C	Capacitor(50WV 47PF)	[C155]
62	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C156]
63	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C157]
64	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C158]
65	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C159]
66	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C160]
67	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C161]
68	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C162]
69	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C163]
70	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C164]
71	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C165]
72	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C166]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[19] Line-1 Control PWB Unit (FO-6700U), Line-2 Control PWB Unit (OPTION:FO-67DL)						
73	VCKYCY1AF105Z	AC		C	Capacitor(10WV 1µF)	[C167]
74	VCCCCY1HH220J	AA		C	Capacitor(50WV 22PF)	[C168]
75	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C169]
76	VCCCCY1HH220J	AA		C	Capacitor(50WV 22PF)	[C170]
77	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C174]
78	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C175]
79	VCKYCY1HB222K	AA		C	Capacitor(50WV 2200PF)	[C176]
80	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C177]
81	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C178]
82	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C179]
83	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C180]
84	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C181]
85	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C183]
86	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C184]
87	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C185]
88	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C186]
89	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C187]
90	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C188]
91	VCKYCY1HF104Z	AA		C	Capacitor(50WV 0.1µF)	[C189]
92	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C195]
93	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C196]
94	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C197]
95	VCCCCY1HH101J	AA		C	Capacitor(50WV 100PF)	[C198]
96	QCNCM2611SC6J	AX	N	C	Connector(60pin)	[CNSUB]
97	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D100]
98	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D101]
99	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D102]
100	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D103]
101	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D104]
102	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D105]
103	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D106]
104	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D107]
105	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D108]
106	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D109]
107	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D110]
108	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D111]
109	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D112]
110	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D113]
111	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D114]
112	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D115]
113	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D116]
114	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D117]
115	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D118]
116	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D121]
117	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D123]
118	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D124]
119	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D125]
120	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D126]
121	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D127]
122	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D128]
123	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D129]
124	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D130]
125	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D131]
126	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D132]
127	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D133]
128	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D134]
129	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D135]
130	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D136]
131	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D137]
132	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D138]
133	VHDHRW0502A-1	AD		B	Diode(HRW0502A)	[D140]
134	VHD1SS355//-1	AB		B	Diode(1SS355)	[D141]
135	VHIR288F26/-1	BV		B	IC,33600bps FAX Modem(R288F)	[IC1]
136	VHIHCF4053M1T	AG		B	IC,2ch.Analog Multiplexer(HCF4053)	[IC2]
137	VHIM65761FP-1	BD		B	IC,QM-Coder(M65761FP)	[IC3]
138	VHIIDT7130-55	AY		B	IC,Dual port RAM(MASTER)(IDT7130SA55PF)	[IC4]
139	VHILZ9FJ59/-1	AX		B	IC,Gate Array(A)(LZ9FJ59)	[IC5]
140	VHIIDT7140-55	AY		B	IC,Dual port RAM(SLAVE)(IDT7140SA55PF)	[IC6]
141	VHIALS74ANS-1	AE		B	IC,Dual D-Type Flip-Flops(74ALS74)	[IC7]
142	VHIALS20ANS-1	AF		B	IC,Dual 4-Input NAND Gate(74ALS20)	[IC8]
143	VHIALS08NS/-1	AF		B	IC,Quadruple 2-Input and Gate(74ALS08)	[IC9]
144	VHI1M16E//J-6	AZ		B	IC,1Mx16bit DRAM(MSM5118165)	[IC10]
145	VHIALS32NS/-1	AD		B	IC,Quadruple 2-Input or Gate(74ALS32)	[IC11]
146	VHIALS163BNS/	AK		B	IC,Counter(74ALS163)	[IC12]
147	VHIALS04BNS-1	AF		B	IC,Hex Inverter(74ALS04)	[IC13]
148	QSOCZ2058SC40	AH		C	IC socket(40pin)	[IC14]
149	VHI27040FEF0B	BD	N	B	IC,256Kx16bit EPROM	[IC14]
150	VHIHD7021606A	BE		B	IC,Microprocessor SH7021(MASK)(HD6437021)	[IC15]
151	VHINJM2902M-1	AF		B	IC,Amplifier(NJM2902)	[IC100]
152	VHIALS32NS/-1	AD		B	IC,Quadruple 2-Input or Gate(74ALS32)	[IC102]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[19] Line-1 Control PWB Unit (FO-6700U), Line-2 Control PWB Unit (OPTION:FO-67DL)						
153	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L100]
154	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L101]
155	VP-1M1R0J0000	AC		C	Coil(1μH)	[L102]
156	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[L103]
157	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[L104]
158	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q100]
159	VSDTC114EK/-1	AB		B	Transistor(DTC114EK)	[Q101]
160	VRD-HT2HY151J	AA		C	Resistor(1/2W 150Ω ±5%)	[R1]
161	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R100]
162	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R101]
163	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R102]
164	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R103]
165	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R104]
166	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R105]
167	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R106]
168	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R107]
169	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R108]
170	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R109]
171	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R110]
172	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R111]
173	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R112]
174	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R113]
175	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R114]
176	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%)	[R115]
177	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R116]
178	VRSCY1JB4422F	AC	N	C	Resistor(1/16W 44.2KΩ ±1%)	[R117]
179	VRSCY1JB4422F	AC	N	C	Resistor(1/16W 44.2KΩ ±1%)	[R118]
180	VRS-CY1JB200J	AC	N	C	Resistor(1/16W 20Ω ±5%)	[R119]
181	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R120]
182	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R121]
183	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R122]
184	VRSCY1JB6812F	AC	N	C	Resistor(1/16W 68.1KΩ ±1%)	[R123]
185	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R124]
186	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R125]
187	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R126]
188	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R127]
189	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R128]
190	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R129]
191	VRS-CY1JB333J	AA		C	Resistor(1/16W 33KΩ ±5%)	[R130]
192	VRS-CY1JB333J	AA		C	Resistor(1/16W 33KΩ ±5%)	[R131]
193	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R133]
194	VRS-CY1JB273J	AA		C	Resistor(1/16W 27KΩ ±5%)	[R134]
195	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R135]
196	VRS-CY1JB822J	AA		C	Resistor(1/16W 8.2KΩ ±5%)	[R136]
197	VRS-CY1JB183J	AA		C	Resistor(1/16W 18KΩ ±5%)	[R137]
198	VRS-CY1JB183J	AA		C	Resistor(1/16W 18KΩ ±5%)	[R138]
199	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R139]
200	VRS-CY1JB223J	AA		C	Resistor(1/16W 22KΩ ±5%)	[R141]
201	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R142]
202	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R143]
203	VRS-CY1JB223J	AA		C	Resistor(1/16W 22KΩ ±5%)	[R144]
204	VRSCY1JB4422F	AC	N	C	Resistor(1/16W 44.2KΩ ±1%)	[R145]
205	VRSCY1JB4422F	AC	N	C	Resistor(1/16W 44.2KΩ ±1%)	[R146]
206	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R147]
207	VRSCY1JB1373F	AC	N	C	Resistor(1/16W 137KΩ ±1%)	[R148]
208	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R149]
209	VRS-CY1JB513J	AA		C	Resistor(1/16W 51KΩ ±5%)	[R150]
210	VRS-CY1JB153J	AA		C	Resistor(1/16W 15KΩ ±5%)	[R151]
211	VRS-CY1JB113J	AA		C	Resistor(1/16W 11KΩ ±5%)	[R152]
212	VRS-CY1JB273J	AA		C	Resistor(1/16W 27KΩ ±5%)	[R153]
213	VRS-CY1JB332J	AA		C	Resistor(1/16W 3.3KΩ ±5%)	[R154]
214	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R155]
215	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%)	[R156]
216	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R157]
217	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R158]
218	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R159]
219	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R160]
220	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R161]
221	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R162]
222	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R163]
223	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R164]
224	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R165]
225	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R166]
226	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R167]
227	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R168]
228	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R169]
229	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R170]
230	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%)	[R171]
231	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R172]
232	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R173]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[19] Line-1 Control PWB Unit (FO-6700U), Line-2 Control PWB Unit (OPTION:FO-67DL)					
233	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R174]
234	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R175]
235	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R178]
236	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R179]
237	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R180]
238	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R181]
239	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R182]
240	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R183]
241	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R184]
242	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R185]
243	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R186]
244	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R187]
245	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R188]
246	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R189]
247	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R190]
248	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R192]
249	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R193]
250	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R194]
251	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R195]
252	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R196]
253	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R197]
254	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R198]
255	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R199]
256	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R200]
257	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R201]
258	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%) [R205]
259	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%) [R207]
260	VRS-CY1JB100J	AA		C	Resistor(1/16W 10Ω ±5%) [R208]
261	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R209]
262	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R210]
263	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R211]
264	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R212]
265	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R213]
266	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R214][FO-6700U]
267	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R215]
268	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R216]
269	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R217]
270	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R218]
271	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R219]
272	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R220]
273	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R221][FO-67DL]
274	VRS-CY1JB103J	AA		C	Resistor(1/16W 10KΩ ±5%) [R222]
275	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R225]
276	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R226]
277	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R227]
278	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R229]
279	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R230]
280	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R231]
281	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R232]
282	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R233]
283	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R234]
284	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R235]
285	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%) [R236]
286	VRS-CY1JB561J	AA		C	Resistor(1/16W 560Ω ±5%) [R238]
287	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R239]
288	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R240]
289	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R243]
290	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R244]
291	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%) [R245]
292	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R246]
293	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R247]
294	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%) [R248]
295	VRS-CY1JB151J	AA		C	Resistor(1/16W 150Ω ±5%) [R249]
296	VRS-CY1JB472J	AA		C	Resistor(1/16W 4.7KΩ ±5%) [R250]
297	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R251]
298	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R253][FO-67DL]
299	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R254][FO-6700U]
300	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R255][FO-6700U]
301	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R256][FO-6700U]
302	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R257][FO-6700U]
303	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R259]
304	VRS-CY1JB471J	AA		C	Resistor(1/16W 470Ω ±5%) [R260][FO-6700U]
305	VRS-CY1JB271J	AA		C	Resistor(1/16W 270Ω ±5%) [R261][FO-6700U]
306	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R262]
307	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%) [R263]
308	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R264]
309	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R265]
310	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R266]
311	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R267]
312	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%) [R268]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[19] Line-1 Control PWB Unit (FO-6700U), Line-2 Control PWB Unit (OPTION:FO-67DL)						
313	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R269]
314	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R270]
315	VRS-CY1JB330J	AA		C	Resistor(1/16W 33Ω ±5%)	[R271]
316	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R272]
317	VRS-CY1JB000J	AA		C	Resistor(1/16W 0Ω ±5%)	[R273]
318	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R282]
319	VRS-CY1JB101J	AA		C	Resistor(1/16W 100Ω ±5%)	[R283]
320	RR-TZ3019SCZZ	AA		C	Resistor array(4.7KΩx4)	[RA1][FO-6700U]
321	RR-TZ3019SCZZ	AA		C	Resistor array(4.7KΩx4)	[RA2][FO-6700U]
322	RR-TZ3019SCZZ	AA		C	Resistor array(4.7KΩx4)	[RA3][FO-6700U]
323	RR-TZ3019SCZZ	AA		C	Resistor array(4.7KΩx4)	[RA4][FO-6700U]
324	RR-TZ3016SCZZ	AA		C	Resistor array(33Ωx4)	[RA8]
325	RR-TZ3016SCZZ	AA		C	Resistor array(33Ωx4)	[RA9]
326	RR-TZ3030SCZZ	AC	N	C	Resistor array(560Ωx4)	[RA10]
327	RR-TZ3030SCZZ	AC	N	C	Resistor array(560Ωx4)	[RA11]
328	VHIN78L05UA-1	AK		B	Regulator	[REG100]
329	RCRSQ2163XHZZ	AN		B	Crystal(56.448MHz)	[X1]
330	RCRSZ2152XHZZ	AF		B	Crystal(19.6608MHz)	[X2]
331	TLABN1235CCZZ	AA		D	EPROM label	
332	TLABP3078SCZZ	AA		D	Shading label(for EP-ROM)	
	(Unit)					
901	DCEKC186PXH01	CE	N	E	Line-1 control PWB unit(Within ROM)	[FO-6700U]
	DCEKC186PXH02	CE	N	E	Line-2 control PWB unit(Within ROM)	[FO-67DL]
[20] LIU PWB 1 Unit (FO-6700U), LIU PWB 2 Unit (OPTION:FO-67DL)						
1	VHVRA391PV6-1	AE		B	Varistor(RA391PV6)	[AR1]
2	QTANZ2042SCZZ	AB		C	Terminal	[ARG]
3	RC-FZ3024SCZZ	AG		C	Capacitor(250WV 0.82μF)	[C1]
4	VCKYPA1HB103K	AA		C	Capacitor(50WV 0.01μF)	[C2]
5	VCKYPU1HF223Z	AA		C	Capacitor(50WV 0.022μF)	[C3]
6	VCEAGA1HW225M	AA		C	Capacitor(50WV 2.2μF)	[C5]
7	VEEAGA1HW225M	AB		C	Capacitor(50WV 2.2μF)	[C6]
8	VCKYPU1HB102K	AA		C	Capacitor(50WV 1000PF)	[C7]
9	VCQYNA1HM333K	AA		C	Capacitor(50WV 0.033μF)	[C8]
10	VCKYPU1HB102K	AA		C	Capacitor(50WV 1000PF)	[C9]
11	VCEAGA1HW475M	AA		C	Capacitor(50WV 4.7μF)	[C10]
12	VCEAGA1HW475M	AA		C	Capacitor(50WV 4.7μF)	[C11]
13	VCEAGA1HW475M	AA		C	Capacitor(50WV 4.7μF)	[C12]
14	VCKYPU1HB471K	AA		C	Capacitor(50WV 470PF)	[C15]
15	VCQYNA1HM333K	AA		C	Capacitor(50WV 0.033μF)	[C16]
16	VCEAGA1HW107M	AA		C	Capacitor(50WV 100μF)	[C18]
17	VCKYPU1HF223Z	AA		C	Capacitor(50WV 0.022μF)	[C19]
18	RRLYD3433XHZZ	AH		B	Relay	[CML]
19	QCNCM7014SC0I	AB		C	Connector(9pin)	[CNLIU]
20	VHDDSS133//-1	AA		B	Diode(1SS133)	[D1]
21	VHDDSS133//-1	AA		B	Diode(1SS133)	[D2]
22	VHINJM2904D-1	AG		B	IC,OP AMP.(NJM2904D)	[IC1]
23	VRD-HT2EY100J	AA		C	Resistor(1/4W 10Ω ±5%)	[J3]
24	QJAKZ2046SCBB	AH		C	Jack(2pin)	[MJ1-2]
25	VHPTLP521-1BL	AE		B	Photo coupler(TLP521)	[PC1]
26	VHPTLP627//-1	AH		B	Photo coupler(TLP627)	[PC2]
27	VHPPC814X//-1	AE		B	Photo transistor(PC814X)	[PC3]
28	VS2SD592A-S-1	AK		B	Transistor(2SD592A)	[Q1]
29	VS2SD1200FR-1	AE		B	Transistor(2SD1200FR)	[Q2]
30	VS2SA1807-P-1	AE		B	Transistor(2SA1807-P)	[Q3]
31	VSDTC114ES/-1	AB		B	Transistor(DTC114ES)	[Q4]
32	VSDTC114ES/-1	AB		B	Transistor(DTC114ES)	[Q5]
33	VRD-HT2EY224J	AA		C	Resistor(1/4W 220KΩ ±5%)	[R2]
34	VRD-HT2EY104J	AA		C	Resistor(1/4W 100KΩ ±5%)	[R3]
35	RR-HZ3011SCZZ	AC		C	Resistor(1/2W 4.7Ω ±5%)	[R4]
36	VRS-HT3AA133J	AB		C	Resistor(1W 13KΩ ±5%)	[R5]
37	VRD-HT2HY223J	AA		C	Resistor(1/2W 22KΩ ±5%)	[R6]
38	VRD-HT2EY124J	AA		C	Resistor(1/4W 120KΩ ±5%)	[R7]
39	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R8]
40	VRD-HT2EY183J	AA		C	Resistor(1/4W 18KΩ ±5%)	[R9]
41	VRD-HT2EY100J	AA		C	Resistor(1/4W 10Ω ±5%)	[R10]
42	VRD-HT2EY303J	AA		C	Resistor(1/4W 30KΩ ±5%)	[R11]
43	VRD-HT2EY910J	AA		C	Resistor(1/4W 91Ω ±5%)	[R12]
44	VRD-HT2EY300J	AA		C	Resistor(1/4W 30Ω ±5%)	[R13]
45	VRD-HT2EY201J	AA		C	Resistor(1/4W 200Ω ±5%)	[R14]
46	VRD-HT2EY621J	AA		C	Resistor(1/4W 620Ω ±5%)	[R15]
47	VRD-HT2EY621J	AA		C	Resistor(1/4W 620Ω ±5%)	[R16]
48	VRD-HT2EY223J	AA		C	Resistor(1/4W 22KΩ ±5%)	[R17]
49	VRD-HT2EY223J	AA		C	Resistor(1/4W 22KΩ ±5%)	[R18]
50	VRD-HT2EY751J	AA		C	Resistor(1/4W 750Ω ±5%)	[R19]
51	VRD-HT2EY223J	AA		C	Resistor(1/4W 22KΩ ±5%)	[R20]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[20] LIU PWB 1 Unit (FO-6700U), LIU PWB 2 Unit (OPTION:FO-67DL)						
52	VRD-HT2EY332J	AA		C	Resistor(1/4W 3.3KΩ ±5%)	[R21]
53	VRD-HT2EY223J	AA		C	Resistor(1/4W 22KΩ ±5%)	[R22]
54	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%)	[R24]
55	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%)	[R26]
56	VHD0R5G4B42-1	AF		B	Bridge diode(0R5G4B42)	[REC]
⚠ 57	RTRNZ2163SCZZ	AH		B	Transformer	[T1]
58	VHVERZV5D471/	AC		B	Varistor(ERZVA5D471)	[VA1]
59	VHVERZV5D471/	AC		B	Varistor(ERZVA5D471)	[VA2]
60	VHVTN07G101-1	AB		B	Varistor(TNR7G101K)	[VA3]
61	VHEHZ2C1///-1	AA		B	Zener diode(HZ2C1)	[ZD1]
62	VHEHZ2C1///-1	AA		B	Zener diode(HZ2C1)	[ZD2]
63	VHEHZ27-1//-1	AB		B	Zener diode(HZ27-A)	[ZD3]
64	VHE1ZC15///-1	AC		B	Zener diode(1ZC15)	[ZD4]
65	VHEMTZJ8R2B-1	AC		B	Zener diode(MTZJ8.2B)	[ZD5]
66	VHEHZ2C1///-1	AA		B	Zener diode(HZ2C1)	[ZD6]
67	VHEHZ2C1///-1	AA		B	Zener diode(HZ2C1)	[ZD7]
	(Unit)					
901	DCEKL471BXH02	BH	N	E	LIU PWB 1 unit(FO-6700U),LIU PWB 2 unit(OPTION:FO-67DL)	
[21] Printer PWB Unit						
1	VCEAGA1VW476M	AB		C	Capacitor(35WV 47μF)	[C1]
2	VCEAGA1CW227M	AB		C	Capacitor(16WV 220μF)	[C2]
3	VCKYTV1HF103Z	AA		C	Capacitor(50WV 0.01μF)	[C100]
4	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C101]
5	VCKYTV1EB821K	AC		C	Capacitor(25WV 820PF)	[C102]
6	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C103]
7	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C104]
8	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C105]
9	VCKYTV1HF103Z	AA		C	Capacitor(50WV 0.01μF)	[C106]
10	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C107]
11	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C108]
12	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C109]
13	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C110]
14	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C111]
15	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C112]
16	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C113]
17	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C114]
18	VCKYTV1EB821K	AC		C	Capacitor(25WV 820PF)	[C115]
19	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C116]
20	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1μF)	[C119]
21	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C120]
22	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C121]
23	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C122]
24	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C123]
25	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C125]
26	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C126]
27	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C127]
28	VCKYTV1CF105Z	AB		C	Capacitor(16WV 1μF)	[C129]
29	VCCCTV1HH180J	AA		C	Capacitor(50WV 18PF)	[C130]
30	VCCCTV1HH180J	AA		C	Capacitor(50WV 18PF)	[C131]
31	VCKYTV1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C132]
32	VCKYTV1EB821K	AC		C	Capacitor(25WV 820PF)	[C133]
33	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C134]
34	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C137]
35	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C138]
36	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C139]
37	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C140]
38	VCKYTV1EB821K	AC		C	Capacitor(25WV 820PF)	[C141]
39	VCKYTV1HF104Z	AA		C	Capacitor(50WV 0.1μF)	[C142]
40	VCKYTV1EF333Z	AB		C	Capacitor(25WV 0.033μF)	[C143]
41	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1μF)	[C144]
42	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C145]
43	RC-FZ3039XHZZ	AB		C	Capacitor(16WV 0.1μF)	[C147]
44	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1μF)	[C148]
45	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C149]
46	VCKYTV1EB102K	AD		C	Capacitor(25WV 1000PF)	[C150]
47	VCKYTV1EF103Z	AA		C	Capacitor(25WV 0.01μF)	[C151]
48	QCNCW2527SC3J	AM		C	Connector(30pin)	[CN1]
49	QCNCM2484SC0B	AB		C	Connector(2pin)	[CN2]
50	QCNCM2584SC0B	AC		C	Connector(2pin)	[CN3]
51	QCNCM2584SC1A	AG		C	Connector(11pin)	[CN4]
52	QCNCM2584SC0G	AE		C	Connector(7pin)	[CN5]
53	QCNCM2584SC0D	AD		C	Connector(4pin)	[CN6]
54	QCNCM2484SC0H	AD		C	Connector(8pin)	[CN7]
55	QCNCM2584SC0C	AC		C	Connector(3pin)	[CN8]
56	QCNCM2584SC0E	AD		C	Connector(5pin)	[CN9]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[21] Printer PWB Unit					
57	QCNCM2498SC0B	AB		C	Connector(2pin) [CN10]
58	QCNCM2584SC1C	AG		C	Connector(13pin) [CN11]
59	QCNCM2498SC0D	AD		C	Connector(4pin) [CN13]
60	QCNCM2401SC0D	AC		C	Connector(4pin) [CN14]
61	QCNCM2585SC0D	AD		C	Connector(4pin) [CN15]
62	VHD1SS226//-1	AB		B	Diode(1SS226) [D100]
63	VHD1SS355//-1	AB		B	Diode(1SS355) [D101]
64	VHVICPS18//-1	AE		B	Varistor [F100]
65	LPLTM3029XHZZ	AF		C	Heat sink [H1]
66	VHITEA3718SDP	BA		B	IC,MOTOR DRIVER(TEA3718SDP) [IC1]
67	RH-IX2162XHZZ	AZ		B	IC,CPU(M38073E4FP) [IC2]
68	VHIULN2003ADR	AF		B	IC,TRANSISTOR ARRAY(ULN2003A) [IC3]
69	VHITEA3718SDP	BA		B	IC,MOTOR DRIVER(TEA3718SDP) [IC4]
70	VHI74VHC02F-1	AF		B	IC,HCMOS(74HC02) [IC5]
71	VSDTD123YK/-1	AC		B	Transistor(DTD123YK) [Q100]
72	VSDTB114EK/-1	AD		B	Transistor(DTB114EK) [Q101]
73	VSDTC114YU/-1	AC		B	Transistor(DTC114YUA) [Q102]
74	VSDTC114YU/-1	AC		B	Transistor(DTC114YUA) [Q103]
75	VSDTC114YU/-1	AC		B	Transistor(DTC114YUA) [Q104]
76	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R1]
77	VRS-TS2AD000J	AA		C	Resistor(1/10W 0Ω ±5%) [R2]
78	VRS-TW2HF1R3J	AC		C	Resistor(1/2W 1.3Ω ±5%) [R100]
79	VRS-TW2HFR68J	AC		C	Resistor(1/2W 0.68Ω ±5%) [R101]
80	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R102]
81	VRS-TS2AD563J	AA		C	Resistor(1/10W 56KΩ ±5%) [R103]
82	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R105]
83	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R106]
84	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R107]
85	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R108]
86	VRS-TW2EE221J	AB		C	Resistor(1/4W 220Ω ±5%) [R109]
87	VRS-TS2AD473J	AA		C	Resistor(1/10W 47KΩ ±5%) [R110]
88	VRS-TS2AD102J	AA		C	Resistor(1/10W 1KΩ ±5%) [R111]
89	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R113]
90	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R114]
91	VRS-TS2AD393J	AA		C	Resistor(1/10W 39KΩ ±5%) [R115]
92	VRS-TS2AD682J	AA		C	Resistor(1/10W 6.8KΩ ±5%) [R116]
93	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R117]
94	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R118]
95	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R119]
96	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R120]
97	VRS-TW2EE100J	AB		C	Resistor(1/4W 10Ω ±5%) [R121]
98	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R122]
99	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R123]
100	VRS-TS2AD302J	AA		C	Resistor(1/10W 3KΩ ±5%) [R124]
101	VRS-TS2AD000J	AA		C	Resistor(1/10W 0Ω ±5%) [R125]
102	VRS-TW2HF1R3J	AC		C	Resistor(1/2W 1.3Ω ±5%) [R126]
103	VRS-TS2AD102J	AA		C	Resistor(1/10W 1KΩ ±5%) [R127]
104	VRS-TW2HFR68J	AC		C	Resistor(1/2W 0.68Ω ±5%) [R128]
105	VRS-TS2AD563J	AA		C	Resistor(1/10W 56KΩ ±5%) [R129]
106	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R130]
107	VRS-TS2AD222J	AA		C	Resistor(1/10W 2.2KΩ ±5%) [R131]
108	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R134]
109	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R135]
110	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R136]
111	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R137]
112	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R138]
113	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R139]
114	VRS-TS2AD820J	AA		C	Resistor(1/10W 82Ω ±5%) [R140]
115	VRS-TS2AD272J	AA		C	Resistor(1/10W 2.7KΩ ±5%) [R141]
116	VRS-TS2AD222F	AA		C	Resistor(1/10W 2.2KΩ ±1%) [R142]
117	VRS-TS2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R143]
118	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R144]
119	VRS-TS2AD222J	AA		C	Resistor(1/10W 2.2KΩ ±5%) [R145]
120	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R146]
121	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R147]
122	VRS-TS2AD680J	AA		C	Resistor(1/10W 68Ω ±5%) [R148]
123	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R151]
124	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R152]
125	VRS-TS2AD103J	AA		C	Resistor(1/10W 10KΩ ±5%) [R153]
126	RR-TZ3019SCZZ	AA		C	Resistor [RA1]
127	RR-TZ3019SCZZ	AA		C	Resistor [RA2]
128	RVR-Z2004SCZZ	AD		B	Variable resistor [VR1]
129	RCRSQ5030XHZZ	AF		B	Crystal(8MHz) [X1]
	(Unit)				
901	DCEKC470BXH02	BR		E	Printer PWB unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[22] Power Supply PWB Unit						
1	LANGK8132PAZZ	AC		C	Bracket	
2	LANGK8223PAZZ	AE		C	SW bracket	
3	LANGK8224PAZZ	AE		C	Inlet bracket	
4	PRDAR0331PAZZ	AE		C	Heat sink	
5	PRDAR0570PAZZ	AK		C	Heat sink	
6	RCORF0071PAZZ	AB		C	Ferrite beads	[BJ2]
7	RC-FZ138DPAZZ	AE		C	Capacitor(250WV 0.22μF)	[C1]
8	RC-FZ137DPAZZ	AE		C	Capacitor(250WV 0.1μF)	[C2]
9	RC-QZ0173PAZZ	AC		C	Capacitor(125WV 1000PF)	[C3]
10	RC-QZ0173PAZZ	AC		C	Capacitor(125WV 1000PF)	[C4]
11	RC-QZ0176PAZZ	AD		C	Capacitor(125WV 4700PF)	[C5]
12	RC-EZ0425PAZZ	AR		C	Capacitor(200WV 470μF)	[C6]
13	RC-FZ137DPAZZ	AE		C	Capacitor(250WV 0.1μF)	[C7]
14	RC-KZ0074PAZZ	AB		C	Capacitor(500WV 470PF)	[C8]
15	RC-QZ0226PAZZ	AB		C	Capacitor(50WV 0.01μF)	[C9]
16	RC-QZ0227PAZZ	AB		C	Capacitor(50WV 3300PF)	[C10]
17	RC-QZS104PARK	AC		C	Capacitor(50WV 0.1μF)	[C13]
18	RC-QZS473PARK	AB		C	Capacitor(50WV 0.047μF)	[C14]
19	VCEAFU1VM108M	AF		C	Capacitor(35WV 1000μF)	[C15]
20	VCEAFU1HM105M	AC		C	Capacitor(50WV 1μF)	[C16]
21	VCEAFU1AM228M	AF		C	Capacitor(10WV 2200μF)	[C17]
22	RC-QZ0221PAZZ	AD		C	Capacitor(250WV 0.01μF)	[C19]
23	VCEAFU1HM105M	AC		C	Capacitor(50WV 1μF)	[C21]
24	QPLGZ0587PAZZ	AE		C	Connector(8pin)	[CN1]
25	QPLGZ0526PAZZ	AD		C	Connector(3pin)	[CN2]
26	QPLGJ2217YAZZ	AC		C	Connector(2pin)	[CN3]
27	QPLGJ2672YAZZ	AD		C	Connector(3pin)	[CN4]
28	QPLGZ0347PAZZ	AF		C	Connector(12pin)	[CN5]
29	QSOCA0030PAZZ	AG		C	AC socket	[CNAC]
30	VHD1SS244//-1	AC		B	Diode(1SS244)	[D1]
31	VHDFMXG12S/-1	AG		B	Diode(FMXG12S)	[D2]
32	VHDFMB-24M/-1	AF		B	Diode(FMB-24M)	[D3]
33	VHDERA2206/-1	AD		B	Diode(ERA22-06)	[D4]
34	VHD1SS270A/-1	AA		B	Diode(1SS270A)	[D5]
35	VHDD3SBA60/-1	AG		B	Diode(D3SBA60)	[DB2]
36	QFS-F0046PAZZ	AD		A	Fuse(125V 4A)	[FS1]
37	QFSHA0016PAZZ	AC		C	Fuse-holder	[FS1]
38	QFS-F0020PAZZ	AD		A	Fuse(125V 8A)	[FS2]
39	QFSHA0016PAZZ	AC		C	Fuse-holder	[FS2]
40	QFS-F0046PAZZ	AD		A	Fuse(125V 4A)	[FS3]
41	QFSHA0016PAZZ	AC		C	Fuse-holder	[FS3]
42	QFS-F0046PAZZ	AD		A	Fuse(125V 4A)	[FS4]
43	QFSHA0016PAZZ	AC		C	Fuse-holder	[FS4]
44	RH-IX0783PAZZ	AD		B	IC(L5431)	[IC1]
45	RH-IX1659PAZZ	AP		B	IC(PQ30RV21)	[IC2]
46	RTRNZ0577PACT	AK		C	Line-Filter	[L1]
47	VHVC271D10A-1	AD		B	Varistor(ENC271D-10A)	[NR1]
48	VHVC271D10A-1	AD		B	Varistor(ENC271D-10A)	[NR2]
49	VHVC271D10A-1	AD		B	Varistor(ENC271D-10A)	[NR3]
50	QSPGH0007PAZZ	AK		C	Varistor(RA-302M-V7)	[NR4]
51	RH-PX0296PAZZ	AF		B	Photo coupler(PC817X2)	[PC1]
52	VHRS21MT2//-1	AK		B	Photo coupler(S21MT2)	[PC2]
53	VS2SC1213-C1A	AC		B	Transistor(2SC1213C)	[Q2]
54	VSDTC114ESA-1	AC		B	Transistor(DTC114ESA)	[Q3]
55	VSDTA114ESA-1	AC		B	Transistor(DTA114ESA)	[Q4]
56	VS2SK2185//-1	AL		B	Transistor(2SK2185)	[Q10]
57	VRD-ST2CD474J	AA		C	Resistor(1/6W 470KΩ ±5%)	[R1]
58	VRD-ST2CD334J	AB		C	Resistor(1/6W 330KΩ ±5%)	[R4]
59	VRD-ST2CD334J	AB		C	Resistor(1/6W 330KΩ ±5%)	[R5]
60	VRS-FT3DD220J	AC		C	Resistor(2W 22Ω ±5%)	[R6]
61	VRD-ST2HF681J	AB		C	Resistor(1/2W 680Ω ±5%)	[R8]
62	RR-NZ0065PAZZ	AB		C	Resistor(1/4W 3.9KΩ)	[R9]
63	VRD-ST2CD223J	AA		C	Resistor(1/6W 22KΩ ±5%)	[R10]
64	VRD-ST2CD473J	AA		C	Resistor(1/6W 47KΩ ±5%)	[R11]
65	RR-XZ0065PAZZ	AC		C	Fusing resistor(1/6W 2.2Ω)	[R12]
66	VRD-ST2CD122J	AA		C	Resistor(1/6W 1.2KΩ ±5%)	[R13]
67	VRD-ST2CD331J	AA		C	Resistor(1/6W 330Ω ±5%)	[R14]
68	VRD-ST2CD473J	AA		C	Resistor(1/6W 47KΩ ±5%)	[R15]
69	VRD-ST2CD222J	AA		C	Resistor(1/6W 2.2KΩ ±5%)	[R16]
70	VRD-ST2CD223J	AA		C	Resistor(1/6W 22KΩ ±5%)	[R18]
71	RR-SZ0074PAZZ	AB		C	Resistor(2W 1KΩ)	[R19]
72	RR-SZ0074PAZZ	AB		C	Resistor(2W 1KΩ)	[R20]
73	VRD-ST2HF122J	AA		C	Resistor(1/2W 1.2KΩ ±5%)	[R21]
74	VRD-ST2HF101J	AA		C	Resistor(1/2W 100Ω ±5%)	[R22]
75	VRD-ST2HF104J	AA		C	Resistor(1/2W 100KΩ ±5%)	[R24]
76	VRD-ST2CD183J	AA		C	Resistor(1/6W 18KΩ ±5%)	[R25]
77	VRD-ST2CD222J	AA		C	Resistor(1/6W 2.2KΩ ±5%)	[R26]
78	VRD-ST2CD222J	AA		C	Resistor(1/6W 2.2KΩ ±5%)	[R27]
79	VRD-ST2CD222J	AA		C	Resistor(1/6W 2.2KΩ ±5%)	[R28]
80	VRD-ST2CD330J	AA		C	Resistor(1/6W 33Ω ±5%)	[R29]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	
[22] Power Supply PWB Unit						
81	VRD-ST2CD330J	AA		C	Resistor(1/6W 33Ω ±5%)	[R30]
82	RR-XZ0078PAZZ	AC		C	Fusing resistor(1/6W 33Ω)	[R35]
83	RR-XZ0076PAZZ	AC		C	Fusing resistor(1/6W 15Ω)	[R41]
84	VRD-ST2CD273J	AA		C	Resistor(1/6W 23.2KΩ)	[R51]
85	RR-NZ0064PAZZ	AB		C	Resistor(1/4W 1.2KΩ)	[R52]
86	VRD-ST2CD124J	AB		C	Resistor(1/6W 120KΩ ±5%)	[R62]
87	RRLYZ0101PAZZ	AK		B	Relay(SDT-SS-124DM)	[RL1]
88	VHSTF321S//-1	AG		B	Thyristor(TF321S)	[SCR1]
89	VHS03P2M///-3	AG		B	Thyristor(03P2M(L))	[SCR2]
90	QSW-C0048PAZZ	AN		C	Switch(AJ7220BK)	[SW1]
91	RTRNZ0748PANE		N	B	Transformer	[T1]
92	VHH11D8R0LA-1	AF		B	Thermistor(NTH11D8R0LA)	[TH1]
93	VHSTM1241I/-1	AN		B	Thyristor(TM1241I)	[TRC1]
94	RVR-M0390PAZZ	AD		C	Variable resistor(1K)	[VR1]
95	VHEHZS6B2//-1	AC		B	Zener diode(HZS6B2)	[ZD1]
96	VHEHZS15-3/-1	AC		B	Zener diode(HZS15-3)	[ZD2]
97	VHEHZS6B2//-1	AC		B	Zener diode(HZS6B2)	[ZD3]
98	VHEHZS27-3/-1	AC		B	Zener diode(HZS27-3)	[ZD4]
99	VHEHZS36-1/-1	AC		B	Zener diode(HZS36-1)	[ZD5]
100	QLUGZ0008PAZZ	AC		C	SW LUG	
B1	LX-BZ0241PAZZ	AA		C	Screw(3x8)	
B2	LX-BZ0254PAZZ	AB		C	Screw(3x6)	
B3	LX-BZ0273PAZZ	AB		C	Screw(3x6)	
B4	LX-BZ0427PAZZ	AB		C	Screw(3x14)	
B5	XBSSN30P06000	AA		C	Screw(3x6)	
	(Unit)					
⚠ 901	RDENT2159XHZZ	BS	N	E	Power supply PWB unit	
[23] Operation Panel PWB Unit						
1	QSW-K2216SCZZ	AD		C	Tact switch	
2	QSW-Z2234SCZZ	AE		C	Paper guide switch	[SW-A]
	(Unit)					
901	DCEKP496AXH02	BE		E	Operation panel PWB unit(without sensor)	
[24] High Voltage PWB Unit						
	(Unit)					
901	0KW4109620201	BR		E	High voltage PWB unit	
[25] Toner Empty PWB Unit						
	(Unit)					
901	0KW4122010202	BD		E	Toner empty PWB unit	
[26] 2nd.Cassette PWB Unit						
1	VCKYPA1HF223Z	AA		C	Capacitor(50WV 0.022µF)	[C1]
2	QCNCM7014SC0B	AD		C	Connector(2pin)	[CN1]
3	QCNCM2584SC1C	AG		C	Connector(13pin)	[CN2]
4	QCNCM7014SC1J	AC		C	Connector(10pin)	[CN3]
5	QCNCM2498SC0E	AH		C	Connector(5pin)	[CN4]
6	VHD1SR139-400	AB		B	Diode(1SR139-400)	[D1]
7	VHISN74HC157N	AE		B	IC,TTL(74HC157)	[IC1]
8	VHPSG206S//-1	AG		B	Photo transistor(SG206S)	[PC1]
9	VRD-HT2EY153J	AA		C	Resistor(1/4W 15KΩ ±5%)	[R1]
10	VRD-HT2EY181J	AA		C	Resistor(1/4W 180Ω ±5%)	[R2]
11	VRD-HT2EY153J	AA		C	Resistor(1/4W 15KΩ ±5%)	[R3]
12	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R4]
13	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R5]
14	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R6]
15	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R7]
16	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%)	[R8]
	(Unit)					
901	DCEKZ472BXH01	AT		E	2nd. cassette PWB unit	
[27] 3rd.Cassette PWB Unit						
1	VCEAGA1HW335M	AB		C	Capacitor(50WV 3.3µF)	[C2]
2	VCKYPA1HB222K	AA		C	Capacitor(50WV 2200PF)	[C4]
3	VCKYPA1HF223Z	AA		C	Capacitor(50WV 0.022µF)	[C5]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[27] 3rd.Cassette PWB Unit					
4	VCKYPA1HF223Z	AA		C	Capacitor(50WV 0.022µF) [C6]
5	QCNCM7014SC1J	AC		C	Connector(10pin) [CN5]
6	QCNCM7014SC0B	AD		C	Connector(2pin) [CN6]
7	QCNCM2498SC0E	AH		C	Connector(5pin) [CN7]
8	QCNCM7014SC0F	AB		C	Connector(6pin) [CN8]
9	VHDDSS133//-1	AA		B	Diode(1SS133) [D1]
10	VHD1SR139-400	AB		B	Diode(1SR139-400) [D2]
11	VHVICPN20//-1	AD		B	Varistor(ICP-N20) [F1]
12	VHIM54666P+-1	AR		B	IC(M54666P) [IC1]
13	RH-IX2153XHZZ	AF		B	IC(74HC164) [IC2]
14	RH-IX2154XHZZ	AE		B	IC(74HC02) [IC3]
15	VHPSG206S//-1	AG		B	Photo transistor(SG206S) [PI1]
16	VS2SD1164//-1	AE		B	Transistor(2SD1164) [Q1]
17	VRD-HT2EY472J	AA		C	Resistor(1/4W 4.7KΩ ±5%) [R1]
18	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%) [R2]
19	VRD-HT2EY181J	AA		C	Resistor(1/4W 180Ω ±5%) [R4]
20	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%) [R5]
21	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%) [R6]
22	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%) [R7]
23	VRD-HT2EY103J	AA		C	Resistor(1/4W 10KΩ ±5%) [R8]
24	VRS-RE3LA101J	AC		C	Resistor(3W 100Ω ±5%) [R9]
	(Unit)				
901	DCEKZ228CXH01	BN		E	3rd. cassette PWB unit
[28] Memory PWB Unit					
1	VCEAPS226AF1C	AC		C	Capacitor(16WV 22µF) [C4]
2	VCEAPS226AF1C	AC		C	Capacitor(16WV 22µF) [C6]
3	VCEAPS226AF1C	AC		C	Capacitor(16WV 22µF) [C9]
4	VCEAPS226AF1C	AC		C	Capacitor(16WV 22µF) [C10]
5	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C100]
6	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C101]
7	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C102]
8	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C103]
9	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C104]
10	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C105]
11	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C106]
12	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C107]
13	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C110]
14	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C113]
15	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C116]
16	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C118]
17	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C120]
18	VCKYTV1EF104Z	AA		C	Capacitor(25WV 0.1µF) [C122]
19	QCNCW2590SC5J	AM		C	Connector(DHB-RD50-S131N-2.9) [CNOP]
20	VHDHRW0502A-1	AD		B	Diode(HRW0502A) [D1]
21	VHDHRW0502A-1	AD		B	Diode(HRW0502A) [D2]
22	VHIHD74HC244F	AE		B	IC(HD74HC244) [IC1]
23	VHIHD74HC244F	AE		B	IC(HD74HC244) [IC2]
24	VHIHD74HC244F	AE		B	IC(HD74HC244) [IC3]
25	VHILH28F016SU	BR		B	IC(LH28F016SUT) [IC4]
26	VHILH28F016SU	BR		B	IC(LH28F016SUT) [IC5]
27	VHIHD74HC138F	AE		B	IC(HD74HC138) [IC6]
28	VRS-TV2AD000J	AA		C	Resistor(1/10W 0Ω ±5%) [R100]
29	VRS-TV2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R101]
30	VRS-TV2AD000J	AA		C	Resistor(1/10W 0Ω ±5%) [R102]
31	VRS-TV2AD472J	AA		C	Resistor(1/10W 4.7KΩ ±5%) [R103]
32	VRS-TV2AD000J	AA		C	Resistor(1/10W 0Ω ±5%) [R104]
33	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R111]
34	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R112]
35	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R113]
36	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R114]
37	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R115]
38	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R116]
39	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R117]
40	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R118]
41	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R119]
42	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R120]
43	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R121]
44	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R122]
45	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R123]
46	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R124]
47	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R125]
48	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R126]
49	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R127]
50	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R128]
51	VRS-TS2AD910J	AA		C	Resistor(1/10W 91Ω ±5%) [R129]
	(Unit)				
901	DCEKM473BXH05	CA	N	E	Memory PWB unit

■Index

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
[C]				
CBSHP2079SC02	7-1	AL		C
CCASP2107XH68	3-1	BS	N	E
〃	4-901	BS	N	E
CCASP2108XH01	12-901	BE		E
〃	14-901	BE		E
CCNW-4955XH01	1-1	AG		C
CGIDM2539XH17	5-901	AY		E
CPLTP2803XHC3	16-1	AV		C
CPLTP3009XHC1	16-2	AU		C
CROLP2320XH01	2-1	AZ		C
CROLR2423XH02	13-2	AS	N	C
〃	15-2	AS	N	C
[D]				
DCEKC185PXHZZ	1-2	CG	N	E
〃	18-901	CG	N	E
DCEKC186PXH01	1-10	CE	N	E
〃	19-901	CE	N	E
DCEKC186PXH02	1-19	CE	N	E
〃	19-901	CE	N	E
DCEKC470BXH02	1-3	BR		E
〃	21-901	BR		E
DCEKL471BXH02	1-4	BH	N	E
〃	20-901	BH	N	E
DCEKM473BXH05	1-49	CA	N	E
〃	28-901	CA	N	E
DCEKP496AXH02	4-1	BE		E
〃	23-901	BE		E
DCEKZ228CXH01	15-3	BN		E
〃	27-901	BN		E
DCEKZ472BXH01	13-3	AT		E
〃	26-901	AT		E
DUNT-455BSCZZ	16-34	BV		S
[G]				
GCABA2327XHSF	1-5	AY	N	D
GCABB2371XHSA	1-6	BA	N	D
GCABC2329XHSA	1-7	AG		D
GCABD2330XHSA	1-8	AL		D
GCABE2331XHSA	1-9	AK		C
GCABG2333XHSA	13-4	AQ		C
〃	15-4	AQ		C
GCABH2334XHSA	13-5	AN		C
〃	15-5	AN		C
GCASP2107XHZJ	4-2	AT	N	D
GCASP2108XHSA	12-1	AT		C
〃	14-1	AT		C
GCASP2109XHSA	12-2	AM		C
〃	14-2	AM		C
GCOVA2405XHSA	2-2	AK		C
GCOVA2407XHSA	13-6	AH		C
〃	15-6	AH		C
GCOVA2408XHSA	13-7	AH		C
〃	15-7	AH		C
GCOVA2416XHSA	16-26	AF		C
[H]				
HPNLC2403XHSA	1-11	AM	N	C
[J]				
JBTN-2184XHZZ	4-3	AK		C
JBTN-2185XHZZ	4-4	AH		C
JBTN-2187XHZZ	4-5	AE		C
JBTN-2189XHZC	4-6	AC		C
JBTN-2253XHSA	4-7	AC		C
JBTN-2254XHSA	4-8	AC		C
JBTN-2255XHSA	2-3	AD		C
[L]				
LANGF2819XHZZ	5-1	AF		C
LANGF2825XHZZ	13-8	AF		C
〃	15-8	AF		C
LANGK2826XHZZ	13-45	AV		C
LANGK8132PAZZ	22-1	AC		C
LANGK8223PAZZ	22-2	AE		C
LANGK8224PAZZ	22-3	AE		C
LBNDJ2006XHZZ	1-12	AA		C
〃	17-1	AA		C
LBSHP2109XHZZ	13-9	AF		C
〃	15-9	AF		C
LBSHP2113XHZZ	7-2	AH		C
LBSHP2131XHZZ	1-53	AD	N	C
〃	17-2	AD	N	C
LFRM-2201XHZZ	7-3	AL		C
LFRM-2202XHZZ	1-13	AP		C
LFRM-2203XHZZ	1-14	AQ		C
LHLDW2158SCZZ	1-15	AC		C
LHLDW2182SCZZ	1-16	AC		C
LHLDW2183SCZZ	1-17	AD		C
〃	6-1	AD		C
LPINS2032XHZZ	13-10	AF		C
〃	15-10	AF		C
LPLTM3011XHZZ	5-2	AK		C
LPLTM3012XHZZ	7-4	AL		C
LPLTM3013XHZZ	6-2	AK		C
LPLTM3014XHZZ	1-18	AS		C
LPLTM3018XHZZ	1-20	AN		C
LPLTM3019XHZZ	2-4	AD		C
LPLTM3022XHZA	12-3	AP	N	C
〃	14-3	AP	N	C
LPLTM3024XHZA	13-1	AX		C
〃	15-1	AX		C
LPLTM3025XHZZ	13-12	AS		C
〃	15-12	AS		C
LPLTM3027XHZZ	13-13	AW		C
〃	15-13	AW		C
LPLTM3028XHZA	15-14	AN		C
LPLTM3028XHZZ	13-14	AN		C
LPLTM3029XHZZ	21-65	AF		C
LPLTM3036XHZZ	2-19	AH		C
LPLTM3037XHZZ	1-23	AD		C
LPLTM3079XHZZ	15-48	AG		C
LPLTM3080XHZZ	13-44	AF		C
〃	15-47	AF		C
LPLTM3111XHZA	1-52	AX	N	C
〃	17-3	AX	N	C
LPLTM3111XHZZ	1-35	AX	N	C
LPLTM3128XHZZ	1-21	AX	N	C
LPLTP2819XHZZ	5-3	AD		C
LPLTP2821XHZZ	5-4	AD		C
LPLTP2823XHZZ	4-9	AF		C
LPLTP3016XHSA	1-24	AN		C
LPLTP3017XHSA	1-25	AH		C
LPLTP3021XHZZ	12-4	AF		C
〃	14-4	AF		C
LPLTP3023XHZZ	13-15	AF		C
〃	15-15	AF		C
LPLTP3044XHZZ	13-16	AF		C
〃	15-16	AF		C
LPLTP3078XHZZ	15-44	AE		C
LRALP2023XHZZ	13-17	AD		C
〃	15-17	AD		C
LRALP2024XHZZ	13-18	AD		C
〃	15-18	AD		C
LSTPP2052XHZZ	5-5	AD		C
LSTY-0057AFZZ	1-50	AC		C
LX-BZ0241PAZZ	22-B1	AA		C
LX-BZ0254PAZZ	22-B2	AB		C
LX-BZ0273PAZZ	22-B3	AB		C
LX-BZ0427PAZZ	22-B4	AB		C
LX-BZ2138XHZZ	2-B1	AB		C
LX-BZ2205XHZZ	1-B7	AC		C
〃	2-B2	AC		C
〃	5-B2	AC		C
〃	12-B2	AC		C
〃	14-B2	AC		C
LX-BZ2240XHZZ	13-B5	AB		C
〃	15-B5	AB		C
LX-BZ2241XHZZ	1-B8	AC		C
LX-WZ2011XHZZ	12-W1	AB	N	C
〃	14-W1	AB	N	C
[M]				
MLEVP2304XHSA	5-6	AE		C
MLEVP2305XHZZ	2-5	AD		C
MLEVP2308XHZZ	13-19	AD		C
〃	15-19	AD		C
MLEVP2309XHZZ	13-20	AE		C
〃	15-20	AE		C
MLOK-2008XHZZ	13-21	AC		C
〃	15-21	AC		C
MSPRC2843XHZZ	5-7	AC		C
MSPRC3090XHZZ	2-7	AH		C
MSPRC3092XHZA	12-5	AF	N	C
〃	14-5	AF	N	C
MSPRC3095XHZZ	13-23	AD		C
〃	15-23	AD		C
MSPRC3096XHZZ	13-24	AC		C
〃	15-24	AC		C
MSPRC3097XHZZ	13-25	AD		C
〃	15-25	AD		C
MSPRC3100XHZZ	2-8	AF		C
MSPRC3126XHZZ	5-11	AG		C
MSPRC3138XHZZ	7-5	AE		C
MSPRC3149XHZZ	2-6	AB		C
MSPRC3180XHZZ	5-10	AD		C
MSPRC3248XHZZ	2-21	AB	N	C
MSPRD3086XHZZ	7-6	AH		C
MSPRD3091XHZZ	2-9	AF		C
MSPRD3093XHZZ	13-22	AG		C
〃	15-22	AG		C
MSPRD3125XHZZ	12-6	AD		C
〃	14-6	AD		C
MSPRD3179XHZZ	5-8	AD		C
MSPRP2841XHZZ	7-7	AC		C
MSPRP3055XHFJ	1-26	AD		C
MSPRP3083XHZZ	5-12	AF		C
MSPRP3087XHZZ	7-8	AF		C
MSPRP3088XHZZ	7-9	AF		C
[N]				
NBRGP2128XHZA	7-10	AE		C
NBRGP2138XHZZ	7-11	AD		C
NBRGP2141XHZZ	7-12	AH		C
NGERH2319XHZZ	7-13	AD		C
NGERH2320XHZZ	7-14	AD		C
NGERH2322XHZZ	7-15	AC		C
NGERH2462XHZZ	7-16	AC		C
NGERH2463XHZZ	7-17	AC		C
NGERH2464XHZZ	6-3	AC		C
NGERH2465XHZZ	6-4	AC		C
NGERH2466XHZZ	1-27	AE		C
〃	2-10	AE		C
NGERH2469XHZZ	13-26	AC		C
〃	15-26	AC		C
NGERH2470XHZZ	13-27	AC		C
〃	15-27	AC		C
NGERH2471XHZZ	13-28	AE		C
〃	15-28	AE		C
NGERH2472XHZZ	13-42	AA		C
NGERH2473XHZZ	15-45	AE		C
NGERH2474XHZZ	15-42	AE		C
NGERP2318XHZZ	2-11	AD		C
NROLP2332XHZZ	7-18	AD		C
NROLP2334XHZA	5-13	AC		C
〃	13-29	AC		C
〃	15-29	AC		C
NROLP2420XHZZ	1-28	AM		C
NROLP2421XHZZ	2-12	AM		C
NROLR2338XHZZ	7-20	AK		C
NROLR2417XHZZ	7-19	AH		C
NROLR2418XHZZ	7-21	AL		C
NROLR2419XHZZ	7-22	AK		C
NROLR2422XHZZ	13-30	AN		C
〃	15-30	AN		C
NSFTZ2306XHZZ	5-14	AD		C
NSFTZ2307XHZZ	7-23	AK		C
NSFTZ2308XHZZ	7-24	AL		C
NSFTZ2309XHZZ	13-31	AC		C
〃	15-31	AC		C
NSFTZ2312XHZZ	13-32	AC		C
〃	15-32	AC		C
[P]				
PBRS-2047SCZZ	5-15	AG		C
PBRS-2048XHZZ	7-25	AD		C
PCAPH2032XHZZ	12-7	AC		C
〃	13-11	AC		C
〃	14-7	AC		C
〃	15-11	AC		C
PCAPZ2030XHZZ	1-56	AF	N	C
PCAPZ2089XHZZ	1-54	AE	N	C
〃	17-4	AE	N	C
PCUSS2097XHZZ	4-10	AC		C
PCUSS2122XHZZ	1-29	AC		C
PCUSS2127XHZZ	2-20	AC		C
PGIDM2539XHZA	5-16	AL		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
PGIDM2540XHZZ	5-17	AF		C
PGIDM2541XHSB	3-2	AL		C
PGIDM2542XHSA	1-30	AD		C
PGIDM2543XHSA	1-31	AD		C
PGIDM2544XHSA	2-13	AE		C
PGIDM2545XHSA	2-14	AC		C
PGIDM2546XHZZ	2-15	AH		C
PGIDM2547XHZA	2-16	AT	N	C
PGIDM2549XHZZ	12-8	AQ		C
〃	14-8	AQ		C
PGIDM2552XHZB	13-33	AF	N	C
〃	15-33	AF	N	C
PGUMM2162XHZZ	5-18	AF		C
PLEGP2071XHZZ	1-32	AE		C
〃	13-34	AE		C
〃	15-34	AE		C
PMAGE2056XHZA	13-35	AN		C
〃	15-35	AN		C
PRDAR0331PAZZ	22-4	AE		C
PRDAR0570PAZZ	22-5	AK		C
PSEL-2017XHZZ	12-9	AE		D
〃	14-9	AE		D
PSHEP3595XHZZ	12-21	AC	N	C
〃	14-21	AC	N	C
PSHEP3596XHZB	12-14	AC	N	C
〃	14-14	AC	N	C
PSHEP3597XHZA	12-15	AC	N	C
〃	14-15	AC	N	C
PSHEP3603XHZZ	12-23	AC	N	C
〃	14-23	AC	N	C
PSHEZ3410XHZZ	1-33	AB		C
PSHEZ3418XHZZ	5-9	AC		C
PSHEZ3419XHZZ	5-19	AB		C
PSHEZ3437XHZZ	13-36	AF		C
〃	15-36	AF		C
PSHEZ3449XHZL	12-10	AF		D
〃	14-10	AF		D
PSHEZ3449XHZR	12-11	AF		D
〃	14-11	AF		D
PSHEZ3455XHZZ	2-17	AF		C
PSHEZ3473XHZZ	1-47	AN		C
PSHEZ3474XHZZ	1-48	AF		C
PSHEZ3477XHZZ	13-41	AB		C
〃	15-41	AB		C
PSHEZ3478XHZZ	13-40	AB		C
〃	15-40	AB		C
PSHEZ3480XHSA	4-11	AF		C
PSPAN2259XHZZ	1-55	AE	N	C
〃	17-5	AE	N	C
PSPAZ2245XHZZ	16-15	AD		C
PSPAZ2253XHZZ	13-43	AD		C
PSPAZ2255XHZZ	15-43	AD		C
PSPAZ2256XHZZ	16-33	AD		C
PSPAZ2262XHZZ	12-22	AB	N	C
〃	14-22	AB	N	C
PSPO-2001XHZZ	1-34	AD		C
PSPO-2008XHZZ	12-12	AE	N	C
〃	14-12	AE	N	C
PSPO-2009XHZZ	12-13	AE	N	C
〃	14-13	AE	N	C
PSTM-2015SCZZ	7-34	AX		E
PTME-2060XHZA	2-18	AG	N	C
PTME-2062XHZZ	12-16	AF		C
〃	14-16	AF		C
PTME-2063XHZZ	12-17	AF		C
〃	14-17	AF		C
PTME-2064XHZZ	12-18	AF		C
〃	14-18	AF		C
PTME-2067XHZZ	7-26	AK		C
[Q]				
QACCD7618QCZZ	16-19	AQ		C
QCNCM2401SC0B	18-154	AA		C
QCNCM2401SC0D	21-60	AC		C
QCNCM2401SC0I	18-148	AF	N	C
QCNCM2482SC2D	18-150	AB		C
QCNCM2484SC0B	21-49	AB		C
QCNCM2484SC0H	21-54	AD		C
QCNCM2498SC0B	21-57	AB		C
QCNCM2498SC0D	21-59	AD		C
QCNCM2498SC0E	26-5	AH		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
QCNCM2498SC0E	27-7	AH		C
QCNCM2525SC3J	18-151	AH		C
QCNCM2584SC0B	21-50	AC		C
QCNCM2584SC0C	21-55	AC		C
QCNCM2584SC0D	21-53	AD		C
QCNCM2584SC0E	21-56	AD		C
QCNCM2584SC0G	21-52	AE		C
QCNCM2584SC1A	21-51	AG		C
QCNCM2584SC1C	21-58	AG		C
〃	26-3	AG		C
QCNCM2585SC0D	21-61	AD		C
QCNCM2589SC5J	18-149	AL		C
QCNCM2611SC6J	19-96	AX	N	C
QCNCM7014SC0B	18-155	AD		C
〃	26-2	AD		C
〃	27-6	AD		C
QCNCM7014SC0D	18-158	AB		C
QCNCM7014SC0F	27-8	AB		C
QCNCM7014SC0H	18-153	AB		C
QCNCM7014SC0I	18-147	AB		C
〃	20-19	AB		C
QCNCM7014SC1B	18-152	AD		C
QCNCM7014SC1J	18-146	AC		C
〃	26-4	AC		C
〃	27-5	AC		C
QCNCW2527SC3J	21-48	AM		C
QCNCW2590SC5J	28-19	AM		C
QCNCW2612SC6J	18-156	BA	N	C
〃	18-157	BA	N	C
QCNW-277AXHZZ	7-27	AY		C
QCNW-283AXHZZ	15-37	AK		C
QCNW-290ASCZZ	16-3	AE		C
〃	17-6	AE		C
QCNW-316AXHZZ	1-51	AF		C
〃	5-20	AF		C
QCNW-369AXHZZ	1-57	AG	N	C
QCNW-4949XHZZ	4-12	AR		C
QCNW-4952XHZZ	1-36	AF		C
QCNW-4953XHZZ	7-28	AK		C
QCNW-4956XHZZ	1-37	AK		C
QCNW-4957XHZZ	1-38	AL		C
QCNW-4960XHZZ	1-39	AD		C
QCNW-4962XHZZ	13-37	AF		C
QCNW-4964XHZZ	13-38	AF		C
〃	15-38	AF		C
QCNWN441AXHZZ	17-7	AH	N	C
QFS-F0020PAZZ	22-38	AD		A
QFS-F0046PAZZ	22-36	AD		A
〃	22-40	AD		A
〃	22-42	AD		A
QFSHA0016PAZZ	22-37	AC		C
〃	22-39	AC		C
〃	22-41	AC		C
〃	22-43	AC		C
QJAKZ2046SCBB	20-24	AH		C
QLUGZ0008PAZZ	22-100	AC		C
QPLGJ2217YAZZ	22-26	AC		C
QPLGJ2672YAZZ	22-27	AD		C
QPLGZ0347PAZZ	22-28	AF		C
QPLGZ0526PAZZ	22-25	AD		C
QPLGZ0587PAZZ	22-24	AE		C
QSOCA0030PAZZ	22-29	AG		C
QSOCZ2058SC40	19-148	AH		C
QSOCZ2066SC42	18-194	AP		C
QSPGH0007PAZZ	22-50	AK		C
QSW-C0048PAZZ	22-90	AN		C
QSW-K2216SCZZ	23-1	AD		C
QSW-M2255SCZZ	1-40	AF		C
QSW-M2296XHZZ	1-41	AD		C
〃	7-29	AD		C
QSW-M2298XHZZ	7-30	AE		C
QSW-Z2234SCZZ	4-14	AE		C
〃	23-2	AE		C
QSW-Z2237SCZZ	7-31	AE		B
QSW-Z2285SCZZ	1-42	AK		C
QSW-Z2286XHZZ	13-39	AH		C
〃	15-39	AH		C
QTANZ2042SCZZ	20-2	AB		C
[R]				
RC-EZ0425PAZZ	22-12	AR		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
RC-FZ137DPAZZ	22-8	AE		C
〃	22-13	AE		C
RC-FZ138DPAZZ	22-7	AE		C
RC-FZ3024SCZZ	20-3	AG		C
RC-FZ3039XHZZ	21-43	AB		C
RC-KZ0074PAZZ	22-14	AB		C
RC-QZS104PARK	22-17	AC		C
RC-QZS473PARK	22-18	AB		C
RC-QZ0173PAZZ	22-9	AC		C
〃	22-10	AC		C
RC-QZ0176PAZZ	22-11	AD		C
RC-QZ0221PAZZ	22-22	AD		C
RC-QZ0226PAZZ	22-15	AB		C
RC-QZ0227PAZZ	22-16	AB		C
RCORF0071PAZZ	22-6	AB		C
RCORF2124XHZZ	7-32	AE		B
RCORF2125XHZZ	3-3	AE		B
RCRSP0074AFZZ	18-453	AE		B
RCRSQ2162XHZZ	18-454	AH		B
RCRSQ2163XHZZ	19-329	AN		B
RCRSQ5030XHZZ	21-129	AF		B
RCRSZ2151XHZZ	18-456	AF		B
RCRSZ2152XHZZ	18-455	AF		B
〃	19-330	AF		B
RCRSZ2158XHZZ	18-457	AF		B
RDENT2159XHZZ	1-43	BS	N	E
〃	22-901	BS	N	E
RH-IX0783PAZZ	22-44	AD		B
RH-IX1659PAZZ	22-45	AP		B
RH-IX2153XHZZ	27-13	AF		B
RH-IX2154XHZZ	27-14	AE		B
RH-IX2162XHZZ	21-67	AZ		B
RH-IX2164XHZZ	18-207	AY	N	B
〃	18-209	AY	N	B
RH-PX0296PAZZ	22-51	AF		B
RMOTZ2146XHZZ	6-5	AW		B
RMOTZ2147XHZZ	15-46	AT		B
RR-HZ3011SCZZ	20-35	AC		C
RR-NZ0064PAZZ	22-85	AB		C
RR-NZ0065PAZZ	22-62	AB		C
RR-SZ0074PAZZ	22-71	AB		C
〃	22-72	AB		C
RR-TZ3016SCZZ	18-449	AA		C
〃	18-450	AA		C
〃	19-324	AA		C
〃	19-325	AA		C
RR-TZ3018SCZZ	18-447	AC		C
〃	18-448	AC		C
RR-TZ3019SCZZ	19-320	AA		C
〃	19-321	AA		C
〃	19-322	AA		C
〃	19-323	AA		C
〃	21-126	AA		C
〃	21-127	AA		C
RR-TZ3023SCZZ	18-451	AC	N	C
〃	18-452	AC	N	C
RR-TZ3030SCZZ	19-326	AC	N	C
〃	19-327	AC	N	C
RR-XZ0065PAZZ	22-65	AC		C
RR-XZ0076PAZZ	22-83	AC		C
RR-XZ0078PAZZ	22-82	AC		C
RRLYD3433XHZZ	20-18	AH		B
RRLYZ0101PAZZ	22-87	AK		B
RTRNZ0577PACT	22-46	AK		C
RTRNZ0748PANE	22-91		N	B
RTRNZ2163SCZZ	20-57	AH		B
RUNTZ2038SCB4	7-33	AZ		E
RVR-M0390PAZZ	22-94	AD		C
RVR-Z2004SCZZ	21-128	AD		B
[S]				
SPAKA006AXHZZ	16-20	AC		C
SPAKA130BXHZZ	16-6	AH		C
SPAKA146BXHZZ	16-23	AH		D
SPAKA166BXHZZ	16-22	AH		C
SPAKA229BXHZZ	16-24	AE		C
SPAKA230BXHZZ	16-25	AE		C
SPAKA241BXHZZ	16-21	AH		C
SPAKA264CXHZZ	16-4	AD		D
SPAKA265CXHZZ	16-5	AD		D
SPAKA358BXHZZ	16-16	AE	N	D

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
SPAKA416BXHZZ	16-28	AH		D
SPAKA438BXHZZ	16-29	AG		D
SPAKA439BXHZZ	16-31	AG		D
SPAKA440BXHZZ	16-32	AG		D
SPAKA451BXHZZ	16-30	AB		C
SPAKA505AXHZZ	16-7	AF		D
SPAKA506AXHZZ	16-8	AP		D
SPAKC235CXHTZ	16-9	BA	N	D
SPAKC245CXHTZ	17-8	AH	N	D
SPAKC282CSCJZ	16-9	BA	N	D
SPAKP247CXHZZ	17-9	AD	N	D
SPAKP398BXHZZ	16-10	AF		D
SSAKA0006UCZZ	17-10	AA		D
SSAKA1430QCZZ	16-11	AB		D
SSAKA2003XHZZ	16-12	AA		D
SSAKA2340QCZZ	17-11	AA		D
SSAKA2342QCZZ	16-27	AA		C
SSAKH1131QCZZ	17-12	AA		D
[T]				
TINSE4149XHTZ	16-13	AZ	N	D
TINSE4150XHTZ	17-13	AE	N	D
TLABH262AXHZZ	1-44	AE		D
TLABH263AXHZZ	12-19	AE		D
〃	14-19	AE		D
TLABH4813XHSA	16-14	AE		D
TLABH4815XHSA	12-20	AE		D
〃	14-20	AE		D
TLABN1235CCZZ	1-45	AA		D
〃	18-458	AA		D
〃	19-331	AA		D
TLABP287CXHZZ	16-17	AF	N	D
TLABP3078SCZZ	1-46	AA		D
〃	18-459	AA		D
〃	19-332	AA		D
TLABS213CXHTZ	1-22	AD	N	D
TLABZ3935XHZZ	16-18	AF		D
[U]				
UBATL2071XHZZ	18-1	AL		B
UINK-2009SC01	7-35	BA		C
[V]				
VCCCCY1HH100D	18-83	AA		C
〃	18-84	AA		C
〃	19-15	AA		C
VCCCCY1HH101J	18-61	AA		C
〃	18-62	AA		C
〃	18-103	AA		C
〃	19-54	AA		C
〃	19-62	AA		C
〃	19-63	AA		C
〃	19-92	AA		C
〃	19-93	AA		C
〃	19-94	AA		C
〃	19-95	AA		C
VCCCCY1HH102J	18-104	AC	N	C
VCCCCY1HH120J	18-21	AA		C
〃	18-96	AA		C
VCCCCY1HH150J	18-98	AB		C
〃	18-142	AB		C
VCCCCY1HH180J	18-22	AA		C
〃	18-27	AA		C
VCCCCY1HH181J	19-28	AA		C
VCCCCY1HH220J	18-73	AA		C
〃	19-74	AA		C
〃	19-76	AA		C
VCCCCY1HH221J	19-52	AA		C
VCCCCY1HH270J	18-72	AA		C
〃	18-106	AA		C
VCCCCY1HH330J	18-102	AA		C
〃	18-105	AA		C
VCCCCY1HH331J	18-39	AB		C
〃	18-41	AB		C
〃	18-71	AB		C
〃	19-51	AB		C
VCCCCY1HH470J	18-65	AA		C
〃	19-60	AA		C
〃	19-61	AA		C
VCCCCY1HH471J	18-38	AA		C
〃	18-40	AA		C
VCCCCY1HH8R0D	18-35	AA		C
〃	18-57	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCCCCY1HH8R0D	19-14	AA		C
VCCCTV1HH180J	21-29	AA		C
〃	21-30	AA		C
VCEAEA1CW106M	19-10	AC		C
VCEAEA1CW336M	18-4	AB		C
〃	18-9	AB		C
〃	18-10	AB		C
〃	18-12	AB		C
VCEAEA1CW476M	18-3	AA		C
〃	18-5	AA		C
〃	18-8	AA		C
〃	19-4	AA		C
〃	19-8	AA		C
〃	19-9	AA		C
VCEAEA1EW106M	19-1	AA		C
〃	19-2	AA		C
〃	19-3	AA		C
〃	19-5	AA		C
〃	19-6	AA		C
VCEAEA1EW476M	18-13	AB		C
〃	19-7	AB		C
VCEAEA1HW105M	18-7	AC		C
VCEAEA1HW475M	18-6	AA		C
VCEAEA1VW476M	18-11	AH		C
VCEAFU1AM228M	22-21	AF		C
VCEAFU1HM105M	22-20	AC		C
〃	22-23	AC		C
VCEAFU1VM108M	22-19	AF		C
VCEAGA1CW227M	21-2	AB		C
VCEAGA1HW107M	18-2	AA		C
〃	20-16	AA		C
VCEAGA1HW225M	20-6	AA		C
VCEAGA1HW335M	27-1	AB		C
VCEAGA1HW475M	20-11	AA		C
〃	20-12	AA		C
〃	20-13	AA		C
VCEAGA1VW476M	21-1	AB		C
VCEAPS226AF1C	28-1	AC		C
〃	28-2	AC		C
〃	28-3	AC		C
〃	28-4	AC		C
VCKYCY1AF105Z	18-15	AC		C
〃	18-120	AC		C
〃	18-122	AC		C
〃	18-124	AC		C
〃	18-125	AC		C
〃	19-17	AC		C
〃	19-41	AC		C
〃	19-43	AC		C
〃	19-68	AC		C
〃	19-69	AC		C
〃	19-70	AC		C
〃	19-71	AC		C
〃	19-72	AC		C
〃	19-73	AC		C
VCKYCY1CB104K	18-70	AB		C
〃	18-91	AB		C
〃	18-92	AB		C
〃	18-95	AB		C
〃	19-21	AB		C
〃	19-23	AB		C
〃	19-24	AB		C
〃	19-49	AB		C
〃	19-50	AB		C
VCKYCY1HB102K	19-40	AA		C
〃	19-53	AA		C
VCKYCY1HB103K	18-31	AA		C
〃	18-33	AA		C
〃	18-93	AA		C
〃	19-11	AA		C
VCKYCY1HB222K	18-23	AA		C
〃	18-24	AA		C
〃	18-43	AA		C
〃	18-44	AA		C
〃	18-45	AA		C
〃	18-49	AA		C
〃	18-50	AA		C
〃	18-55	AA		C
〃	18-63	AA		C
〃	18-74	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCKYCY1HB222K	18-75	AA		C
〃	18-76	AA		C
〃	18-79	AA		C
〃	18-80	AA		C
〃	18-97	AA		C
〃	18-110	AA		C
〃	18-111	AA		C
〃	18-112	AA		C
〃	18-113	AA		C
〃	18-114	AA		C
〃	18-116	AA		C
〃	18-117	AA		C
〃	18-123	AA		C
〃	18-141	AA		C
〃	19-19	AA		C
〃	19-22	AA		C
〃	19-59	AA		C
〃	19-75	AA		C
〃	19-77	AA		C
〃	19-78	AA		C
〃	19-79	AA		C
VCKYCY1HB331K	18-18	AA		C
〃	18-46	AA		C
VCKYCY1HB472K	18-94	AA		C
VCKYCY1HF104Z	18-14	AA		C
〃	18-16	AA		C
〃	18-17	AA		C
〃	18-19	AA		C
〃	18-20	AA		C
〃	18-25	AA		C
〃	18-26	AA		C
〃	18-28	AA		C
〃	18-29	AA		C
〃	18-30	AA		C
〃	18-32	AA		C
〃	18-34	AA		C
〃	18-36	AA		C
〃	18-37	AA		C
〃	18-42	AA		C
〃	18-47	AA		C
〃	18-48	AA		C
〃	18-51	AA		C
〃	18-52	AA		C
〃	18-53	AA		C
〃	18-54	AA		C
〃	18-56	AA		C
〃	18-58	AA		C
〃	18-59	AA		C
〃	18-60	AA		C
〃	18-64	AA		C
〃	18-66	AA		C
〃	18-67	AA		C
〃	18-68	AA		C
〃	18-69	AA		C
〃	18-77	AA		C
〃	18-78	AA		C
〃	18-81	AA		C
〃	18-82	AA		C
〃	18-85	AA		C
〃	18-86	AA		C
〃	18-87	AA		C
〃	18-88	AA		C
〃	18-89	AA		C
〃	18-90	AA		C
〃	18-99	AA		C
〃	18-100	AA		C
〃	18-101	AA		C
〃	18-107	AA		C
〃	18-108	AA		C
〃	18-109	AA		C
〃	18-115	AA		C
〃	18-118	AA		C
〃	18-119	AA		C
〃	18-121	AA		C
〃	18-126	AA		C
〃	18-127	AA		C
〃	18-128	AA		C
〃	18-129	AA		C
〃	18-130	AA		C
〃	18-131	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCKYCY1HF104Z	18-132	AA		C
〃	18-133	AA		C
〃	18-134	AA		C
〃	18-135	AA		C
〃	18-136	AA		C
〃	18-137	AA		C
〃	18-138	AA		C
〃	18-139	AA		C
〃	18-140	AA		C
〃	18-143	AA		C
〃	18-144	AA		C
〃	18-145	AA		C
〃	19-12	AA		C
〃	19-13	AA		C
〃	19-16	AA		C
〃	19-18	AA		C
〃	19-20	AA		C
〃	19-25	AA		C
〃	19-26	AA		C
〃	19-27	AA		C
〃	19-29	AA		C
〃	19-30	AA		C
〃	19-31	AA		C
〃	19-32	AA		C
〃	19-33	AA		C
〃	19-34	AA		C
〃	19-35	AA		C
〃	19-36	AA		C
〃	19-37	AA		C
〃	19-38	AA		C
〃	19-39	AA		C
〃	19-42	AA		C
〃	19-45	AA		C
〃	19-46	AA		C
〃	19-48	AA		C
〃	19-55	AA		C
〃	19-56	AA		C
〃	19-57	AA		C
〃	19-58	AA		C
〃	19-64	AA		C
〃	19-65	AA		C
〃	19-66	AA		C
〃	19-67	AA		C
〃	19-80	AA		C
〃	19-81	AA		C
〃	19-82	AA		C
〃	19-83	AA		C
〃	19-84	AA		C
〃	19-85	AA		C
〃	19-86	AA		C
〃	19-87	AA		C
〃	19-88	AA		C
〃	19-89	AA		C
〃	19-90	AA		C
〃	19-91	AA		C
VCKYPA1HB103K	20-4	AA		C
VCKYPA1HB222K	27-2	AA		C
VCKYPA1HF223Z	26-1	AA		C
〃	27-3	AA		C
〃	27-4	AA		C
VCKYPU1HB102K	20-8	AA		C
〃	20-10	AA		C
VCKYPU1HB471K	20-14	AA		C
VCKYPU1HF223Z	20-5	AA		C
〃	20-17	AA		C
VCKYTV1CF105Z	21-28	AB		C
VCKYTV1CF225Z	19-44	AD		C
〃	19-47	AD		C
VCKYTV1EB102K	21-7	AD		C
〃	21-24	AD		C
〃	21-25	AD		C
〃	21-27	AD		C
〃	21-34	AD		C
〃	21-35	AD		C
〃	21-36	AD		C
〃	21-37	AD		C
〃	21-42	AD		C
〃	21-45	AD		C
〃	21-46	AD		C
VCKYTV1EB821K	21-5	AC		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCKYTV1EB821K	21-18	AC		C
〃	21-32	AC		C
〃	21-38	AC		C
VCKYTV1EF103Z	21-4	AA		C
〃	21-6	AA		C
〃	21-8	AA		C
〃	21-10	AA		C
〃	21-11	AA		C
〃	21-12	AA		C
〃	21-13	AA		C
〃	21-14	AA		C
〃	21-15	AA		C
〃	21-16	AA		C
〃	21-17	AA		C
〃	21-19	AA		C
〃	21-21	AA		C
〃	21-22	AA		C
〃	21-23	AA		C
〃	21-26	AA		C
〃	21-33	AA		C
〃	21-47	AA		C
VCKYTV1EF104Z	21-20	AA		C
〃	21-41	AA		C
〃	21-44	AA		C
〃	28-5	AA		C
〃	28-6	AA		C
〃	28-7	AA		C
〃	28-8	AA		C
〃	28-9	AA		C
〃	28-10	AA		C
〃	28-11	AA		C
〃	28-12	AA		C
〃	28-13	AA		C
〃	28-14	AA		C
〃	28-15	AA		C
〃	28-16	AA		C
〃	28-17	AA		C
〃	28-18	AA		C
VCKYTV1EF333Z	21-40	AB		C
VCKYTV1HF103Z	21-3	AA		C
〃	21-9	AA		C
VCKYTV1HF104Z	21-31	AA		C
〃	21-39	AA		C
VCQYNA1HM333K	20-9	AA		C
〃	20-15	AA		C
VEEAGA1HW225M	20-7	AB		C
VHDDAP202U/-1	18-163	AB		B
VHDDA204K//-1	18-164	AC		B
〃	18-173	AC		B
VHDDSS133//-1	20-20	AA		B
〃	20-21	AA		B
〃	27-9	AA		B
VHDD3SBA60/-1	22-35	AG		B
VHDERA2206/-1	22-33	AD		B
VHDFMB-24M/-1	22-32	AF		B
VHDFMXG12S/-1	22-31	AG		B
VHDHRW0502A-1	18-166	AD		B
〃	18-167	AD		B
〃	18-168	AD		B
〃	18-169	AD		B
〃	18-170	AD		B
〃	18-171	AD		B
〃	18-172	AD		B
〃	18-174	AD		B
〃	18-175	AD		B
〃	18-176	AD		B
〃	18-177	AD		B
〃	18-178	AD		B
〃	18-179	AD		B
〃	18-180	AD		B
〃	18-181	AD		B
〃	18-182	AD		B
〃	18-183	AD		B
〃	18-184	AD		B
〃	18-185	AD		B
〃	18-186	AD		B
〃	18-187	AD		B
〃	18-189	AD		B
〃	19-97	AD		B
〃	19-98	AD		B

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VHDHRW0502A-1	19-99	AD		B
〃	19-100	AD		B
〃	19-101	AD		B
〃	19-102	AD		B
〃	19-103	AD		B
〃	19-104	AD		B
〃	19-105	AD		B
〃	19-106	AD		B
〃	19-107	AD		B
〃	19-108	AD		B
〃	19-109	AD		B
〃	19-110	AD		B
〃	19-111	AD		B
〃	19-112	AD		B
〃	19-113	AD		B
〃	19-114	AD		B
〃	19-115	AD		B
〃	19-116	AD		B
〃	19-117	AD		B
〃	19-118	AD		B
〃	19-119	AD		B
〃	19-120	AD		B
〃	19-121	AD		B
〃	19-122	AD		B
〃	19-123	AD		B
〃	19-124	AD		B
〃	19-125	AD		B
〃	19-126	AD		B
〃	19-127	AD		B
〃	19-128	AD		B
〃	19-129	AD		B
〃	19-130	AD		B
〃	19-131	AD		B
〃	19-132	AD		B
〃	19-133	AD		B
〃	28-20	AD		B
〃	28-21	AD		B
VHDSR104///-1	18-159	AF		B
〃	18-160	AF		B
〃	18-161	AF		B
〃	18-162	AF		B
VHD0R5G4B42-1	20-56	AF		B
VHD1SR139-400	26-6	AB		B
〃	27-10	AB		B
VHD1SS226//-1	21-62	AB		B
VHD1SS244//-1	22-30	AC		B
VHD1SS270A/-1	22-34	AA		B
VHD1SS355//-1	18-165	AB		B
〃	18-188	AB		B
〃	18-190	AB		B
〃	19-134	AB		B
〃	21-63	AB		B
VHEHZS15-3/-1	22-96	AC		B
VHEHZS27-3/-1	22-98	AC		B
VHEHZS36-1/-1	22-99	AC		B
VHEHZS6B2//-1	22-95	AC		B
〃	22-97	AC		B
VHEHZ2C1///-1	20-61	AA		B
〃	20-62	AA		B
〃	20-66	AA		B
〃	20-67	AA		B
VHEHZ27-1//-1	20-63	AB		B
VHEMTZJ8R2B-1	20-65	AC		B
VHE1ZC15///-1	20-64	AC		B
VHH11D8R0LA-1	22-92	AF		B
VHIAD8051//-1	18-196	AN		B
VHIALS04BNS-1	18-229	AF		B
〃	19-147	AF		B
VHIALS08NS/-1	18-213	AF		B
〃	19-143	AF		B
VHIALS163BNS/	18-231	AK		B
〃	19-146	AK		B
VHIALS20ANS-1	18-228	AF		B
〃	19-142	AF		B
VHIALS32NS/-1	18-216	AD		B
〃	18-230	AD		B
〃	19-145	AD		B
〃	19-152	AD		B
VHIALS74ANS-1	18-215	AE		B
〃	19-141	AE		B

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VHIBA10393F-1	18-201	AC		B
VHIHCF4053M1T	18-212	AG		B
〃	19-136	AG		B
VHIHD7021606A	18-204	BE		B
〃	19-150	BE		B
VHIHD74HC08FM	18-217	AF		B
VHIHD74HC138F	28-27	AE		B
VHIHD74HC14FM	18-226	AF		B
VHIHD74HC157F	18-224	AH		B
VHIHD74HC244F	28-22	AE		B
〃	28-23	AE		B
〃	28-24	AE		B
VHIHD74HC32FM	18-220	AC		B
VHIHD74HC74FM	18-223	AD		B
VHIHD74LS244F	18-208	AF		B
VHIHD74LS374F	18-206	AF		B
VHIHD74LV08T1	18-225	AE		B
VHIHD813201F1	18-214	BE		B
VHIIDT7130-55	19-138	AY		B
VHIIDT7140-55	19-140	AY		B
VHILB1845//-1	18-199	AY		B
VHILC82103/-1	18-197	BA		B
VHILH28F016SU	28-25	BR		B
〃	28-26	BR		B
VHILH28F80S10	18-202	BH		B
VHILH5116NA10	18-218	AL		B
VHILR38292/-1	18-210	AY		B
VHILZ9FJ59/-1	18-200	AX		B
〃	19-139	AX		B
VHIM54666P+-1	27-12	AR		B
VHIM65761FP-1	19-137	BD		B
VHINJM2113M-1	18-203	AG		B
VHINJM2902M-1	19-151	AF		B
VHINJM2904D-1	20-22	AG		B
VHINJM2904M-2	18-198	AG		B
VHINJM78M12-1	18-232	AG		B
VHIN78L05UA-1	19-328	AK		B
VHIPST596CMT1	18-227	AF		B
VHIR288F26/-1	19-135	BV		B
VHISM8578BV-1	18-193	AK		B
VHISN74HC157N	26-7	AE		B
VHITC7S00FU-1	18-219	AE		B
VHITC74HCU04F	18-233	AE		B
VHITEA3718SDP	21-66	BA		B
〃	21-69	BA		B
VHIULN2003ADR	21-68	AF		B
VHI1M16E//J-6	18-205	AZ		B
〃	18-211	AZ		B
〃	19-144	AZ		B
VHI27040FEF0B	19-149	BD	N	B
VHI27160FBQ0B	18-195	BM	N	B
VHI74VHC02F-1	21-70	AF		B
VHI74VHC04F-1	18-222	AE		B
VHI74VHC393FT	18-221	AK		B
VHPPC814X//-1	20-27	AE		B
VHPSG206S//-1	26-8	AG		B
〃	27-15	AG		B
VHPTLP521-1BL	20-25	AE		B
VHPTLP627//-1	20-26	AH		B
VHRS21MT2//-1	22-52	AK		B
VHSTF321S//-1	22-88	AG		B
VHSTM1241I/-1	22-93	AN		B
VHS03P2M///-3	22-89	AG		B
VHVC271D10A-1	22-47	AD		B
〃	22-48	AD		B
〃	22-49	AD		B
VHVERZV5D471/	20-58	AC		B
〃	20-59	AC		B
VHVICPN20//-1	27-11	AD		B
VHVICPS10//-1	18-191	AG		B
VHVICPS18//-1	18-192	AE		B
〃	21-64	AE		B
VHVRA391PV6-1	20-1	AE		B
VHVTN07G101-1	20-60	AB		B
VP-1M1R0J0000	19-155	AC		C
VRD-HT2EY100J	20-23	AA		C
〃	20-41	AA		C
VRD-HT2EY103J	20-54	AA		C
〃	20-55	AA		C
〃	27-18	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRD-HT2EY103J	27-20	AA		C
〃	27-21	AA		C
〃	27-22	AA		C
〃	27-23	AA		C
VRD-HT2EY104J	20-34	AA		C
VRD-HT2EY124J	20-38	AA		C
VRD-HT2EY153J	26-9	AA		C
〃	26-11	AA		C
VRD-HT2EY181J	26-10	AA		C
〃	27-19	AA		C
VRD-HT2EY183J	20-40	AA		C
VRD-HT2EY201J	20-45	AA		C
VRD-HT2EY223J	20-48	AA		C
〃	20-49	AA		C
〃	20-51	AA		C
〃	20-53	AA		C
VRD-HT2EY224J	20-33	AA		C
VRD-HT2EY300J	20-44	AA		C
VRD-HT2EY303J	20-42	AA		C
VRD-HT2EY332J	20-52	AA		C
VRD-HT2EY472J	20-39	AA		C
〃	26-12	AA		C
〃	26-13	AA		C
〃	26-14	AA		C
〃	26-15	AA		C
〃	26-16	AA		C
〃	27-17	AA		C
VRD-HT2EY621J	20-46	AA		C
〃	20-47	AA		C
VRD-HT2EY751J	20-50	AA		C
VRD-HT2EY910J	20-43	AA		C
VRD-HT2HY151J	19-160	AA		C
VRD-HT2HY152J	18-251	AA		C
VRD-HT2HY223J	20-37	AA		C
VRD-ST2CD122J	22-66	AA		C
VRD-ST2CD124J	22-86	AB		C
VRD-ST2CD183J	22-76	AA		C
VRD-ST2CD222J	22-69	AA		C
〃	22-77	AA		C
〃	22-78	AA		C
〃	22-79	AA		C
VRD-ST2CD223J	22-63	AA		C
〃	22-70	AA		C
VRD-ST2CD273J	22-84	AA		C
VRD-ST2CD330J	22-80	AA		C
〃	22-81	AA		C
VRD-ST2CD331J	22-67	AA		C
VRD-ST2CD334J	22-58	AB		C
〃	22-59	AB		C
VRD-ST2CD473J	22-64	AA		C
〃	22-68	AA		C
VRD-ST2CD474J	22-57	AA		C
VRD-ST2HF101J	22-74	AA		C
VRD-ST2HF104J	22-75	AA		C
VRD-ST2HF122J	22-73	AA		C
VRD-ST2HF681J	22-61	AB		C
VRG-ST2HB470J	18-252	AD	N	C
VRS-CY1JB000J	18-234	AA		C
〃	18-236	AA		C
〃	18-237	AA		C
〃	18-254	AA		C
〃	18-261	AA		C
〃	18-265	AA		C
〃	18-266	AA		C
〃	18-271	AA		C
〃	18-272	AA		C
〃	18-273	AA		C
〃	18-274	AA		C
〃	18-294	AA		C
〃	18-303	AA		C
〃	18-304	AA		C
〃	18-306	AA		C
〃	18-307	AA		C
〃	18-309	AA		C
〃	18-310	AA		C
〃	18-311	AA		C
〃	18-312	AA		C
〃	18-313	AA		C
〃	18-315	AA		C
〃	18-316	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB000J	18-318	AA		C
〃	18-322	AA		C
〃	18-326	AA		C
〃	18-332	AA		C
〃	18-343	AA		C
〃	18-345	AA		C
〃	18-386	AA		C
〃	18-387	AA		C
〃	18-403	AA		C
〃	18-407	AA		C
〃	18-430	AA		C
〃	18-444	AA		C
〃	18-445	AA		C
〃	19-153	AA		C
〃	19-154	AA		C
〃	19-157	AA		C
〃	19-182	AA		C
〃	19-183	AA		C
〃	19-186	AA		C
〃	19-189	AA		C
〃	19-190	AA		C
〃	19-193	AA		C
〃	19-199	AA		C
〃	19-214	AA		C
〃	19-216	AA		C
〃	19-217	AA		C
〃	19-218	AA		C
〃	19-231	AA		C
〃	19-232	AA		C
〃	19-234	AA		C
〃	19-236	AA		C
〃	19-239	AA		C
〃	19-240	AA		C
〃	19-247	AA		C
〃	19-248	AA		C
〃	19-249	AA		C
〃	19-250	AA		C
〃	19-251	AA		C
〃	19-252	AA		C
〃	19-254	AA		C
〃	19-255	AA		C
〃	19-256	AA		C
〃	19-261	AA		C
〃	19-270	AA		C
〃	19-275	AA		C
〃	19-276	AA		C
〃	19-277	AA		C
〃	19-283	AA		C
〃	19-289	AA		C
〃	19-290	AA		C
〃	19-297	AA		C
〃	19-298	AA		C
〃	19-299	AA		C
〃	19-303	AA		C
〃	19-306	AA		C
〃	19-307	AA		C
〃	19-316	AA		C
〃	19-317	AA		C
VRS-CY1JB100J	18-235	AA		C
〃	18-269	AA		C
〃	18-356	AA		C
〃	18-401	AA		C
〃	18-402	AA		C
〃	19-156	AA		C
〃	19-161	AA		C
〃	19-162	AA		C
〃	19-164	AA		C
〃	19-165	AA		C
〃	19-168	AA		C
〃	19-169	AA		C
〃	19-170	AA		C
〃	19-172	AA		C
〃	19-173	AA		C
〃	19-174	AA		C
〃	19-175	AA		C
〃	19-176	AA		C
〃	19-258	AA		C
〃	19-259	AA		C
〃	19-260	AA		C
VRS-CY1JB101J	18-259	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB101J	18-260	AA		C
〃	18-334	AA		C
〃	18-350	AA		C
〃	18-351	AA		C
〃	18-352	AA		C
〃	18-374	AA		C
〃	18-399	AA		C
〃	18-400	AA		C
〃	18-425	AA		C
〃	18-426	AA		C
〃	18-431	AA		C
〃	18-439	AA		C
〃	18-440	AA		C
〃	18-441	AA		C
〃	18-442	AA		C
〃	18-443	AA		C
〃	19-181	AA		C
〃	19-318	AA		C
〃	19-319	AA		C
VRS-CY1JB102J	18-267	AA		C
〃	18-278	AA		C
〃	18-282	AA		C
〃	18-361	AA		C
〃	18-363	AA		C
〃	18-380	AA		C
〃	18-409	AA		C
〃	18-417	AA		C
VRS-CY1JB103J	18-257	AA		C
〃	18-258	AA		C
〃	18-263	AA		C
〃	18-264	AA		C
〃	18-287	AA		C
〃	18-288	AA		C
〃	18-290	AA		C
〃	18-291	AA		C
〃	18-292	AA		C
〃	18-293	AA		C
〃	18-297	AA		C
〃	18-298	AA		C
〃	18-301	AA		C
〃	18-302	AA		C
〃	18-319	AA		C
〃	18-320	AA		C
〃	18-323	AA		C
〃	18-324	AA		C
〃	18-325	AA		C
〃	18-340	AA		C
〃	18-341	AA		C
〃	18-342	AA		C
〃	18-346	AA		C
〃	18-364	AA		C
〃	18-375	AA		C
〃	18-381	AA		C
〃	18-382	AA		C
〃	18-383	AA		C
〃	18-384	AA		C
〃	18-427	AA		C
〃	18-428	AA		C
〃	18-429	AA		C
〃	18-434	AA		C
〃	18-435	AA		C
〃	19-163	AA		C
〃	19-166	AA		C
〃	19-167	AA		C
〃	19-171	AA		C
〃	19-177	AA		C
〃	19-187	AA		C
〃	19-188	AA		C
〃	19-195	AA		C
〃	19-201	AA		C
〃	19-202	AA		C
〃	19-220	AA		C
〃	19-222	AA		C
〃	19-224	AA		C
〃	19-225	AA		C
〃	19-226	AA		C
〃	19-227	AA		C
〃	19-228	AA		C
〃	19-229	AA		C
〃	19-230	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB103J	19-235	AA		C
〃	19-237	AA		C
〃	19-238	AA		C
〃	19-246	AA		C
〃	19-266	AA		C
〃	19-273	AA		C
〃	19-274	AA		C
VRS-CY1JB104J	18-327	AA		C
VRS-CY1JB105J	18-289	AA		C
〃	18-314	AA		C
〃	18-389	AA		C
VRS-CY1JB113J	19-211	AA		C
VRS-CY1JB151J	18-335	AA		C
〃	18-336	AA		C
〃	18-344	AA		C
〃	18-373	AA		C
〃	19-215	AA		C
〃	19-291	AA		C
〃	19-294	AA		C
〃	19-295	AA		C
VRS-CY1JB153J	19-210	AA		C
VRS-CY1JB154J	18-347	AA		C
VRS-CY1JB182J	18-268	AA		C
VRS-CY1JB183J	19-197	AA		C
〃	19-198	AA		C
VRS-CY1JB200J	18-357	AC	N	C
〃	19-180	AC	N	C
VRS-CY1JB203J	18-378	AA		C
〃	18-379	AA		C
〃	18-385	AA		C
VRS-CY1JB222J	18-253	AA		C
〃	18-432	AA		C
VRS-CY1JB223F	18-275	AC	N	C
VRS-CY1JB223J	18-376	AA		C
〃	18-377	AA		C
〃	19-200	AA		C
〃	19-203	AA		C
VRS-CY1JB271J	18-255	AA		C
〃	18-283	AA		C
〃	18-284	AA		C
〃	18-299	AA		C
〃	18-300	AA		C
〃	18-353	AA		C
〃	18-355	AA		C
〃	18-391	AA		C
〃	18-392	AA		C
〃	18-393	AA		C
〃	18-394	AA		C
〃	18-395	AA		C
〃	18-396	AA		C
〃	18-397	AA		C
〃	18-398	AA		C
〃	18-406	AA		C
〃	18-413	AA		C
〃	18-414	AA		C
〃	18-436	AA		C
〃	18-437	AA		C
〃	18-438	AA		C
〃	19-292	AA		C
〃	19-293	AA		C
〃	19-300	AA		C
〃	19-301	AA		C
〃	19-302	AA		C
〃	19-305	AA		C
VRS-CY1JB273J	19-194	AA		C
〃	19-212	AA		C
VRS-CY1JB302J	18-270	AA		C
〃	18-349	AA		C
〃	18-390	AA		C
VRS-CY1JB330J	18-256	AA		C
〃	18-354	AA		C
〃	18-358	AA		C
〃	18-372	AA		C
〃	18-404	AA		C
〃	18-415	AA		C
〃	18-416	AA		C
〃	18-446	AA		C
〃	19-219	AA		C
〃	19-221	AA		C
〃	19-223	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB330J	19-233	AA		C
〃	19-268	AA		C
〃	19-269	AA		C
〃	19-308	AA		C
〃	19-309	AA		C
〃	19-310	AA		C
〃	19-311	AA		C
〃	19-312	AA		C
〃	19-313	AA		C
〃	19-314	AA		C
〃	19-315	AA		C
VRS-CY1JB331J	18-405	AA		C
VRS-CY1JB332J	18-305	AA		C
〃	18-408	AA		C
〃	18-410	AA		C
〃	18-411	AA		C
〃	18-412	AA		C
〃	19-185	AA		C
〃	19-206	AA		C
〃	19-208	AA		C
〃	19-213	AA		C
VRS-CY1JB333F	18-276	AA		C
VRS-CY1JB333J	18-362	AA		C
〃	19-191	AA		C
〃	19-192	AA		C
VRS-CY1JB393F	18-277	AC	N	C
VRS-CY1JB471J	18-348	AA		C
〃	18-365	AA		C
〃	18-368	AA		C
〃	18-369	AA		C
〃	19-285	AA		C
〃	19-304	AA		C
VRS-CY1JB472J	18-262	AA		C
〃	18-279	AA		C
〃	18-285	AA		C
〃	18-286	AA		C
〃	18-295	AA		C
〃	18-296	AA		C
〃	18-321	AA		C
〃	18-328	AA		C
〃	18-329	AA		C
〃	18-330	AA		C
〃	18-331	AA		C
〃	18-333	AA		C
〃	18-337	AA		C
〃	18-338	AA		C
〃	18-339	AA		C
〃	18-359	AA		C
〃	18-360	AA		C
〃	18-366	AA		C
〃	18-367	AA		C
〃	18-371	AA		C
〃	18-418	AA		C
〃	18-419	AA		C
〃	18-420	AA		C
〃	18-421	AA		C
〃	18-422	AA		C
〃	18-423	AA		C
〃	18-433	AA		C
〃	19-241	AA		C
〃	19-242	AA		C
〃	19-243	AA		C
〃	19-244	AA		C
〃	19-245	AA		C
〃	19-253	AA		C
〃	19-257	AA		C
〃	19-262	AA		C
〃	19-263	AA		C
〃	19-264	AA		C
〃	19-265	AA		C
〃	19-267	AA		C
〃	19-271	AA		C
〃	19-272	AA		C
〃	19-278	AA		C
〃	19-279	AA		C
〃	19-280	AA		C
〃	19-281	AA		C
〃	19-282	AA		C
〃	19-284	AA		C
〃	19-287	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB472J	19-288	AA		C
〃	19-296	AA		C
VRS-CY1JB513J	19-209	AA		C
VRS-CY1JB561J	18-370	AA		C
〃	18-388	AA		C
〃	19-286	AA		C
VRS-CY1JB562J	18-308	AA		C
〃	18-424	AA		C
VRS-CY1JB563F	18-280	AC	N	C
〃	18-281	AC	N	C
VRS-CY1JB681J	18-317	AA		C
VRS-CY1JB822J	19-196	AA		C
VRS-FT3DD220J	22-60	AC		C
VRS-HT3AAR47J	18-249	AC		C
〃	18-250	AC		C
VRS-HT3AA133J	20-36	AB		C
VRS-RE3LA101J	27-24	AC		C
VRS-TS2AD000J	21-77	AA		C
〃	21-101	AA		C
VRS-TS2AD102J	21-88	AA		C
〃	21-103	AA		C
VRS-TS2AD103J	21-83	AA		C
〃	21-89	AA		C
〃	21-90	AA		C
〃	21-94	AA		C
〃	21-96	AA		C
〃	21-98	AA		C
〃	21-99	AA		C
〃	21-106	AA		C
〃	21-108	AA		C
〃	21-109	AA		C
〃	21-110	AA		C
〃	21-111	AA		C
〃	21-112	AA		C
〃	21-113	AA		C
〃	21-118	AA		C
〃	21-120	AA		C
〃	21-121	AA		C
〃	21-123	AA		C
〃	21-124	AA		C
〃	21-125	AA		C
VRS-TS2AD222F	21-116	AA		C
VRS-TS2AD222J	21-107	AA		C
〃	21-119	AA		C
VRS-TS2AD272J	21-115	AA		C
VRS-TS2AD302J	21-100	AA		C
VRS-TS2AD393J	21-91	AA		C
VRS-TS2AD472J	21-76	AA		C
〃	21-80	AA		C
〃	21-82	AA		C
〃	21-84	AA		C
〃	21-85	AA		C
〃	21-93	AA		C
〃	21-95	AA		C
〃	21-117	AA		C
VRS-TS2AD473J	21-87	AA		C
VRS-TS2AD563J	21-81	AA		C
〃	21-105	AA		C
VRS-TS2AD680J	21-122	AA		C
VRS-TS2AD682J	21-92	AA		C
VRS-TS2AD820J	21-114	AA		C
VRS-TS2AD910J	28-33	AA		C
〃	28-34	AA		C
〃	28-35	AA		C
〃	28-36	AA		C
〃	28-37	AA		C
〃	28-38	AA		C
〃	28-39	AA		C
〃	28-40	AA		C
〃	28-41	AA		C
〃	28-42	AA		C
〃	28-43	AA		C
〃	28-44	AA		C
〃	28-45	AA		C
〃	28-46	AA		C
〃	28-47	AA		C
〃	28-48	AA		C
〃	28-49	AA		C
〃	28-50	AA		C
〃	28-51	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-TV2AD000J	28-28	AA		C
〃	28-30	AA		C
〃	28-32	AA		C
VRS-TV2AD472J	28-29	AA		C
〃	28-31	AA		C
VRS-TW2EE100J	21-97	AB		C
VRS-TW2EE221J	21-86	AB		C
VRS-TW2HFR68J	21-79	AC		C
〃	21-104	AC		C
VRS-TW2HF1R3J	21-78	AC		C
〃	21-102	AC		C
VRSCY1JB1373F	19-207	AC	N	C
VRSCY1JB4422F	19-178	AC	N	C
〃	19-179	AC	N	C
〃	19-204	AC	N	C
〃	19-205	AC	N	C
VRSCY1JB6812F	19-184	AC	N	C
VSDTA114EK/-1	18-247	AB		B
〃	18-248	AB		B
VSDTA114ESA-1	22-55	AC		B
VSDTB114EK/-1	21-72	AD		B
VSDTC114EK/-1	18-241	AB		B
〃	18-242	AB		B
〃	18-243	AB		B
〃	18-244	AB		B
〃	18-245	AB		B
〃	18-246	AB		B
〃	19-158	AB		B
〃	19-159	AB		B
VSDTC114ES/-1	20-31	AB		B
〃	20-32	AB		B
VSDTC114ESA-1	22-54	AC		B
VSDTC114YU/-1	21-73	AC		B
〃	21-74	AC		B
〃	21-75	AC		B
VSDTD123YK/-1	21-71	AC		B
VS2SA1037KR-1	18-240	AB		B
VS2SA1807-P-1	20-30	AE		B
VS2SC1213-C1A	22-53	AC		B
VS2SD1164//-1	18-238	AE		B
〃	27-16	AE		B
VS2SD1200FR-1	20-29	AE		B
VS2SD1664Q/-1	18-239	AD		B
VS2SD592A-S-1	20-28	AK		B
VS2SK2185//-1	22-56	AL		B
VVLLMG2025TPR	4-13	BA		B
[X]				
XBBSD23P08000	1-B1	AA		C
XBPSD30P06K00	13-B1	AA		C
〃	15-B1	AA		C
XBPSN40P06K00	1-B6	AA		C
XBSSN30P06000	22-B5	AA		C
XEBSD30P08000	13-B8	AA		C
〃	15-B8	AA		C
XEBSD30P10000	1-B2	AA		C
〃	2-B3	AA		C
〃	3-B1	AA		C
〃	5-B1	AA		C
〃	7-B2	AA		C
〃	12-B1	AA		C
〃	13-B2	AA		C
〃	14-B1	AA		C
〃	15-B2	AA		C
XEBSE30P10000	1-B3	AA		C
〃	13-B3	AA		C
〃	15-B3	AA		C
XHBSD30P06000	1-B4	AA		C
〃	6-B1	AA		C
〃	7-B1	AA		C
〃	13-B4	AA		C
〃	15-B4	AA		C
〃	17-14	AA		C
XHBSD30P18000	1-B9	AA		C
〃	17-15	AA		C
XHBSD30P25000	1-B10	AA		C
XHBSE30P06000	13-B6	AA		C
〃	15-B6	AA		C
XHBSE30P10000	1-B5	AA		C
〃	13-B7	AA		C
〃	15-B7	AA		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
XRESJ50-06000	7-E1	AA		C
XUBSD20P06000	4-B1	AA		C
[0]				
0KW0957304001	9-6	AE		C
0KW0957551601	10-15	AG		C
0KW0972300901	9-1	AF		C
0KW0993204501	8-8	AC		C
0KW4109053103	8-12	BY		E
0KW4109075404	10-30	BD		C
0KW4109075501	11-44	BD		C
0KW4109075605	11-3	BC		E
0KW4109076001	11-48	BB		C
0KW4109201301	11-1	AF		C
0KW4109201502	11-4	AC		C
0KW4109202102	8-14	AD		C
0KW4109202201	11-2	AC		D
0KW4109202301	11-6	AD		D
0KW4109202401	8-13	AF		D
0KW4109203902	11-28	AG		C
0KW4109206001	11-31	AF		C
0KW4109250101	11-10	AL		C
0KW4109250201	11-11	AL		C
0KW4109250301	11-7	AH		C
0KW4109250401	11-30	AK		C
0KW4109250501	11-9	AF		C
0KW4109250601	11-13	AF		C
0KW4109250701	11-12	AF		C
0KW4109250801	11-26	AG		C
0KW4109251001	11-23	AF		C
0KW4109251101	11-27	AF		C
0KW4109251201	11-29	AL		C
0KW4109251401	11-14	AF		C
0KW4109251501	11-15	AD		C
0KW4109251601	11-25	AD		C
0KW4109251701	11-24	AF		C
0KW4109251801	11-21	AF		C
0KW4109251901	11-20	AF		C
0KW4109301003	9-16	AF		C
0KW4109301302	8-15	AD		C
0KW4109301412	9-13	AD		C
0KW4109301514	9-12	AD		C
0KW4109302005	8-5	AL		C
0KW4109302202	8-3	AC		C
0KW4109303301	9-11	AF		C
0KW4109303413	9-15	AF		C
0KW4109304103	9-23	AC		C
0KW4109305101	9-17	AD		C
0KW4109305201	9-21	AG		C
0KW4109350203	9-9	AH		C
0KW4109410301	11-42	BF		C
0KW4109410403	11-47	AH		C
0KW4109410703	11-45	AC		C
0KW4109410802	11-37	AC		C
0KW4109411102	11-40	AF		C
0KW4109411201	11-33	AD		C
0KW4109411403	11-46	AF		C
0KW4109411503	11-38	AF		C
0KW4109411702	11-41	AH		C
0KW4109411803	11-43	AD		C
0KW4109550101	10-23	BF		C
0KW4109550201	10-10	BD		C
0KW4109550312	10-20	AN		C
0KW4109550503	10-6	BA		C
0KW4109551201	10-11	AL		C
0KW4109551601	10-14	AC		C
0KW4109551701	10-3	AC		C
0KW4109551801	10-5	AF		C
0KW4109552101	10-12	AK		C
0KW4109552201	10-25	AL		C
0KW4109552402	10-19	AG		C
0KW4109552501	10-29	AG		C
0KW4109552601	10-26	AF		C
0KW4109553001	10-4	AC		C
0KW4109553301	10-13	AL		C
0KW4109554101	10-18	AD		C
0KW4109554201	10-21	AD		C
0KW4109554301	10-16	AD		C
0KW4109554401	10-22	AD		C
0KW4109555001	10-31	AQ		C
0KW4109620201	11-34	BR		E

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
0KW4109620201	24-901	BR		E
0KW4109630101	11-36	AN		C
0KW4109630201	10-17	AY		B
0KW4109650201	10-24	BB		B
0KW4109670101	10-27	AY		B
0KW4110075101	9-5	AT		C
0KW4110301801	9-10	AC		C
0KW4110350301	9-22	AC		C
0KW4110551101	10-7	AH		C
0KW4110553501	10-8	AH		C
0KW4110553601	10-9	AS		C
0KW4122010202	8-4	BD		E
〃	25-901	BD		E
0KW4122020101	9-25	AG		C
0KW4122030102	11-5	BU		E
0KW4122033102	9-29	BT		E
0KW4122035201	10-32	BV		E
0KW4122039102	11-49	CS		E
0KW4122206801	8-19	AQ		C
0KW4122206901	8-16	AG		C
0KW4122207001	8-11	AD		C
0KW4122207102	8-1	AM		C
0KW4122207601	8-21	AD		C
0KW4122207801	8-6	BB		C
0KW4122207902	8-9	AQ		C
0KW4122233001	11-19	AC		C
0KW4122233101	11-18	AC		C
0KW4122235001	8-10	AF		C
0KW4122252001	11-17	AV		C
0KW4122252112	11-22	AD		C
0KW4122252212	11-16	AN		C
0KW4122300101	9-14	AU		C
0KW4122300201	9-8	BK		C
0KW4122305501	9-4	AL		C
0KW4122305601	9-3	AH		C
0KW4122340201	8-24	AF		C
0KW4122340401	8-20	AD		C
0KW4122340501	8-23	AD		C
0KW4122355602	9-24	AG		C
0KW4122360502	8-18	AQ		C
0KW4122360701	9-2	AF		C
0KW4122361602	9-27	AD		C
0KW4122361902	9-20	AC		C
0KW4122362902	9-7	AQ		C
0KW4122364201	9-26	AG		C
0KW4122364301	9-28	AR		C
0KW4122365001	9-19	AG		C
0KW4122610101	8-7	BP		B
0KW4122610501	11-8	BN		B
0KW4122620101	9-18	BC		B
0KW4122630401	8-17	AL		B
0KW4122680302	10-1	AM		C
0KW4122680502	11-39	AL		C
0KW4122680602	11-32	AV		C
0KW4122680701	10-28	AL		C
0KW4122681302	11-35	AH		C
0KW4122681401	8-22	AL		C
0KW4122681702	8-2	AN		C
0KW9335141031	10-2	BA		B
0KW9384131091	11-50	AC		C
0KW9384170024	11-53	AF		C
0KW9384171111	11-52	AD		C
0KW9384201021	11-51	AD		C
0KW9646030613	8-B1	AB		C
〃	10-B1	AB		C
0KW9646030813	9-B1	AB		C
〃	11-B1	AB		C
0KW9721050001	9-E1	AB		C
0KW9721090001	9-E2	AC		C
0KW9735030613	8-B2	AB		C
〃	9-B2	AB		C
〃	11-B2	AB		C
0KW9735030813	10-B4	AC		C
0KW9739030613	8-B4	AB		C
〃	9-B4	AB		C
0KW9739030813	8-B3	AB		C
〃	8-B5	AB		C
〃	9-B3	AB		C
〃	10-B2	AB		C
〃	11-B3	AB		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
0KW9742030813	11-B4	AB		C
0KW9742031013	10-B3	AB		C
0KW9743030813	8-B6	AB		C
0KW9751301050	9-30	AE		C

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK

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